

(FILE 'HOME' ENTERED AT 15:38:04 ON 10 MAY 2007)

FILE 'REGISTRY' ENTERED AT 15:38:22 ON 10 MAY 2007

L1 STRUCTURE UPLOADED  
L2 50 S L1  
L3 STRUCTURE UPLOADED  
L4 50 S L3  
L5 6006 S L3 SSS FULL

FILE 'CAPLUS' ENTERED AT 15:43:27 ON 10 MAY 2007

L6 274 S L5  
L7 212 S L5/THU

FILE 'STNGUIDE' ENTERED AT 15:43:46 ON 10 MAY 2007

FILE 'HCAPLUS' ENTERED AT 15:45:02 ON 10 MAY 2007

L8 987 S (FINE(W)LINE)  
L9 7181 S WRINKLE

FILE 'STNGUIDE' ENTERED AT 15:45:06 ON 10 MAY 2007

FILE 'HCAPLUS' ENTERED AT 15:45:21 ON 10 MAY 2007

FILE 'STNGUIDE' ENTERED AT 15:45:22 ON 10 MAY 2007

FILE 'CAPLUS' ENTERED AT 15:45:35 ON 10 MAY 2007

L10 0 S L7 AND L8 AND L9  
L11 0 S L7 AND L8  
L12 0 S L7 AND L9

FILE 'STNGUIDE' ENTERED AT 15:46:01 ON 10 MAY 2007

FILE 'CAPLUS' ENTERED AT 15:46:44 ON 10 MAY 2007

L13 0 S L7 AND COSMETIC  
L14 0 S L7 AND DERMATOL?

FILE 'STNGUIDE' ENTERED AT 15:47:10 ON 10 MAY 2007

FILE 'CAPLUS' ENTERED AT 15:47:16 ON 10 MAY 2007

FILE 'STNGUIDE' ENTERED AT 15:47:16 ON 10 MAY 2007

FILE 'HCAPLUS' ENTERED AT 15:48:35 ON 10 MAY 2007

L15 897 S HYPERPIGMENT?  
L16 1640 S PHOTODAMAG?  
L17 255702 S SKIN

FILE 'STNGUIDE' ENTERED AT 15:48:41 ON 10 MAY 2007

FILE 'HCAPLUS' ENTERED AT 15:48:51 ON 10 MAY 2007

FILE 'CAPLUS' ENTERED AT 15:48:58 ON 10 MAY 2007

L18 0 S L7 AND L15

FILE 'REGISTRY' ENTERED AT 15:52:12 ON 10 MAY 2007

L19 STRUCTURE UPLOADED  
L20 50 S L19  
L21 STRUCTURE UPLOADED  
L22 50 S L21  
L23 1261 S L21 SSS FULL

FILE 'STNGUIDE' ENTERED AT 15:57:29 ON 10 MAY 2007

FILE 'HCAPLUS' ENTERED AT 15:58:20 ON 10 MAY 2007

L24 26 S L22  
L25 7730 S DERMATOL?  
L26 59068 S COSMETIC  
L27 987 S (FINE(W)LINE)  
L28 7181 S WRINKLE  
L29 255702 S SKIN

FILE 'STNGUIDE' ENTERED AT 15:58:27 ON 10 MAY 2007

FILE 'HCAPLUS' ENTERED AT 15:59:08 ON 10 MAY 2007

L30 0 S L24 AND (L25 OR L26 OR L29)  
L31 0 S L24 AND (L27 OR L28)

FILE 'STNGUIDE' ENTERED AT 15:59:11 ON 10 MAY 2007

FILE 'HCAPLUS' ENTERED AT 15:59:24 ON 10 MAY 2007

FILE 'STNGUIDE' ENTERED AT 15:59:25 ON 10 MAY 2007

FILE 'HCAPLUS' ENTERED AT 16:00:52 ON 10 MAY 2007

L32 26 S L24 AND (AY<2004 OR PY<2004 OR PRY<2004)

=> file registry  
COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
0.21	0.21

FULL ESTIMATED COST

FILE 'REGISTRY' ENTERED AT 15:38:22 ON 10 MAY 2007  
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Property values tagged with IC are from the ZIC/VINITI data file  
provided by InfoChem.

STRUCTURE FILE UPDATES: 9 MAY 2007 HIGHEST RN 934521-72-9  
DICTIONARY FILE UPDATES: 9 MAY 2007 HIGHEST RN 934521-72-9

New CAS Information Use Policies, enter HELP USAGETERMS for details.

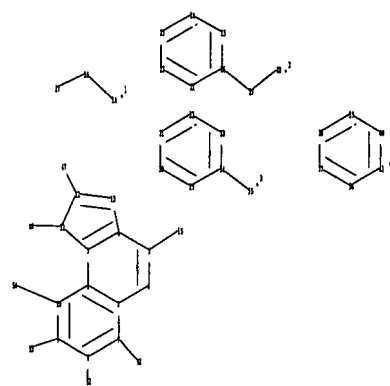
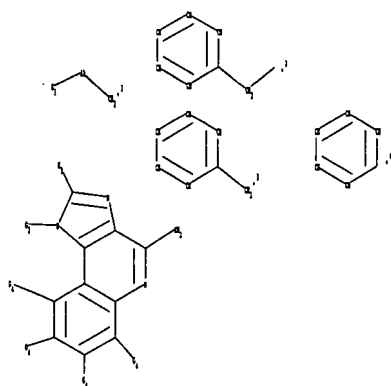
TSCA INFORMATION NOW CURRENT THROUGH December 2, 2006

Please note that search-term pricing does apply when  
conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and  
predicted properties as well as tags indicating availability of  
experimental property data in the original document. For information  
on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stndoc/properties.html>

=>  
Uploading C:\Program Files\Stnexp\Queries\10627994generic.str



chain nodes :

14 15 16 17 27 28 35 46 47 51 52 53 54

ring nodes :

1 2 3 4 5 6 7 8 9 10 11 12 13 21 22 23 24 25 26 29 30 31 32  
33 34 36 37 38 39 40 41

chain bonds :

5-15 7-51 8-52 9-53 10-54 11-46 12-47 14-16 16-17 26-27 27-28 34-35

ring bonds :

1-2 1-6 1-7 2-3 2-10 3-4 3-11 4-5 4-13 5-6 7-8 8-9 9-10 11-12 12-13  
21-22 21-26 22-23 23-24 24-25 25-26 29-30 29-34 30-31 31-32 32-33 33-34  
36-37 36-41  
37-38 38-39 39-40 40-41

exact/norm bonds :

3-11 4-13 5-15 7-51 8-52 9-53 10-54 11-12 11-46 12-13 12-47 14-16 16-17

exact bonds :

26-27 27-28 34-35

normalized bonds :

1-2 1-6 1-7 2-3 2-10 3-4 4-5 5-6 7-8 8-9 9-10 21-22 21-26 22-23 23-24  
24-25 25-26 29-30 29-34 30-31 31-32 32-33 33-34 36-37 36-41 37-38 38-39  
39-40 40-41

G1:H,O

G2:Ak, [\*1], [\*2], [\*3], [\*4]

G3:Ak, [\*2], [\*3], [\*4]

G4:C,H,O

Connectivity :

16:2 M minimum RC ring/chain

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom  
11:Atom 12:Atom 13:Atom 14:CLASS 15:CLASS 16:CLASS 17:CLASS 21:Atom 22:Atom  
23:Atom 24:Atom  
25:Atom 26:Atom 27:CLASS 28:CLASS 29:Atom 30:Atom 31:Atom 32:Atom 33:Atom  
34:Atom 35:CLASS  
36:Atom 37:Atom 38:Atom 39:Atom 40:Atom 41:Atom 46:CLASS 47:CLASS 51:CLASS  
52:CLASS  
53:CLASS 54:CLASS

Generic attributes :

16:

Saturation : Saturated

L1 STRUCTURE UPLOADED

=> d l1

L1 HAS NO ANSWERS

L1 STR

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

Structure attributes must be viewed using STN Express query preparation.

=> s l1

SAMPLE SEARCH INITIATED 15:38:43 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 540 TO ITERATE

100.0% PROCESSED 540 ITERATIONS

50 ANSWERS

INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*

BATCH \*\*COMPLETE\*\*

PROJECTED ITERATIONS: 9406 TO 12194

PROJECTED ANSWERS: 5108 TO 7212

L2 50 SEA SSS SAM L1

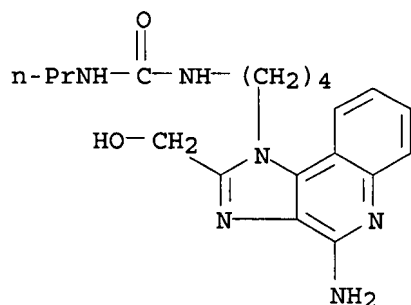
=> d l2 scan

L2 50 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN

IN Urea, N-[4-[4-amino-2-(hydroxymethyl)-1H-imidazo[4,5-c]quinolin-1-yl]butyl]-N'-propyl- (9CI)

MF C19 H26 N6 O2

CI COM



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0

=> log hold

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

0.45

0.66

SESSION WILL BE HELD FOR 120 MINUTES

STN INTERNATIONAL SESSION SUSPENDED AT 15:39:08 ON 10 MAY 2007

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:SSPTAEXO1623

PASSWORD:

\* \* \* \* \* RECONNECTED TO STN INTERNATIONAL \* \* \* \* \*

SESSION RESUMED IN FILE 'REGISTRY' AT 15:42:09 ON 10 MAY 2007

FILE 'REGISTRY' ENTERED AT 15:42:09 ON 10 MAY 2007

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COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

0.45

0.66

=>

Uploading

SUPLOAD IS NOT A RECOGNIZED COMMAND

The previous command name entered was not recognized by the system.

For a list of commands available to you in the current file, enter

"HELP COMMANDS" at an arrow prompt (=>).

C:\Program Files\Stnexp\Queries\10627994generic2.str

L3 STRUCTURE UPLOADED

=> s l3

SAMPLE SEARCH INITIATED 15:42:31 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 540 TO ITERATE

100.0% PROCESSED 540 ITERATIONS

50 ANSWERS

INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)

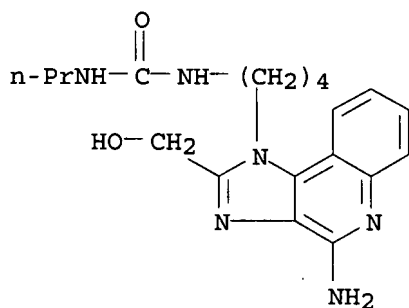
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
BATCH \*\*COMPLETE\*\*  
PROJECTED ITERATIONS: 9406 TO 12194  
PROJECTED ANSWERS: 5108 TO 7212

L4 50 SEA SSS SAM L3

=> d l4 scan

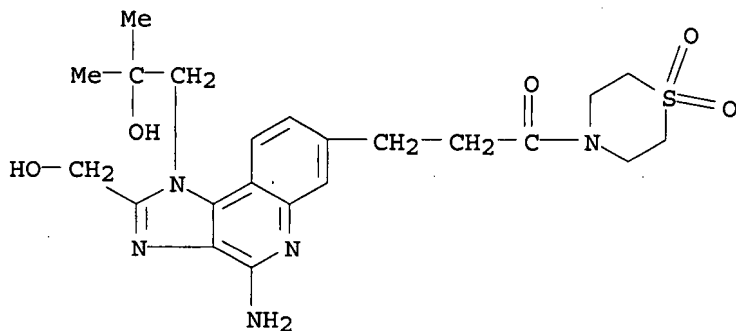
L4 50 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN  
IN Urea, N-[4-[4-amino-2-(hydroxymethyl)-1H-imidazo[4,5-c]quinolin-1-yl]butyl]-N'-propyl- (9CI)  
MF C19 H26 N6 O2  
CI COM



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

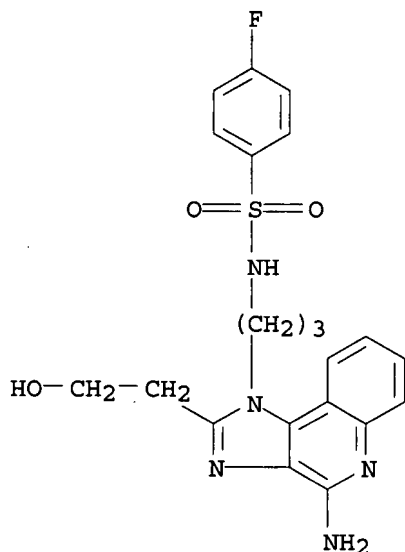
HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):3

L4 50 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN  
IN Thiomorpholine, 4-[3-[4-amino-2-(hydroxymethyl)-1-(2-hydroxy-2-methylpropyl)-1H-imidazo[4,5-c]quinolin-7-yl]-1-oxopropyl]-, 1,1-dioxide (9CI)  
MF C22 H29 N5 O5 S



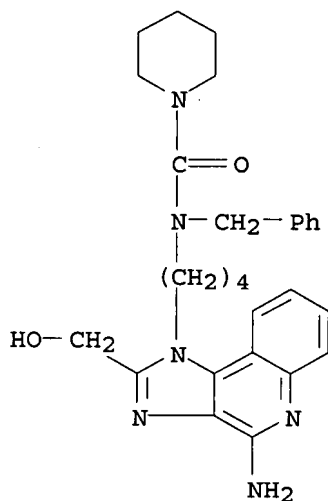
\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L4 50 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN  
 IN Benzenesulfonamide, N-[3-[4-amino-2-(2-hydroxyethyl)-1H-imidazo[4,5-  
 c]quinolin-1-yl]propyl]-4-fluoro- (9CI)  
 MF C21 H22 F N5 O3 S  
 CI COM



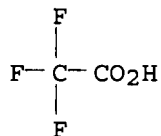
\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L4 50 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN  
 IN 1-Piperidinecarboxamide, N-[4-[4-amino-2-(hydroxymethyl)-1H-imidazo[4,5-  
 c]quinolin-1-yl]butyl]-N-(phenylmethyl)-, trifluoroacetate (salt) (9CI)  
 MF C28 H34 N6 O2 . x C2 H F3 O2  
 CM 1





CM 2



HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0

=> s l3 sss full

FULL SEARCH INITIATED 15:43:21 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 11198 TO ITERATE

100.0% PROCESSED 11198 ITERATIONS  
SEARCH TIME: 00.00.01

6006 ANSWERS

L5 6006 SEA SSS FUL L3

=> file caplus

COST IN U.S. DOLLARS

SINCE FILE  
ENTRY

TOTAL  
SESSION

FULL ESTIMATED COST

173.00

173.21

FILE 'CAPLUS' ENTERED AT 15:43:27 ON 10 MAY 2007

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<http://www.cas.org/infopolicy.html>

=> s l5

L6 274 L5

=> s l5/thu

274 L5

887376 THU/RL

L7 212 L5/THU

(L5 (L) THU/RL)

=> file stnguide

COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	2.48	175.69

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FILE CONTAINS CURRENT INFORMATION.  
 LAST RELOADED: May 4, 2007 (20070504/UP).

=> file hcaplus

COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	0.12	175.81

FILE 'HCAPLUS' ENTERED AT 15:45:02 ON 10 MAY 2007  
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 FILE LAST UPDATED: 1 May 2007 (20070501/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate

=> s (fine(w)line)

```

      312423 FINE
      688113 LINE
L8      987 (FINE(W)LINE)

```

=> s wrinkle

```

L9      7181 WRINKLE

```

=> s L7 and L8 and L9

COMMAND INTERRUPTED

If this message appears repeatedly, please notify the Help Desk.  
 Enter "HELP STN" for information on contacting the nearest STN Help  
 Desk by telephone or via SEND in the STNMAIL file.

=> file stnguide

COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	2.60	178.41

FILE 'STNGUIDE' ENTERED AT 15:45:06 ON 10 MAY 2007

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FILE CONTAINS CURRENT INFORMATION.  
LAST RELOADED: May 4, 2007 (20070504/UP).

=> file hcaplus		
COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	0.06	178.47

FILE 'HCAPLUS' ENTERED AT 15:45:21 ON 10 MAY 2007  
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FILE LAST UPDATED: 1 May 2007 (20070501/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate

=> s L7 and L8 and L9

COMMAND INTERRUPTED

If this message appears repeatedly, please notify the Help Desk.  
Enter "HELP STN" for information on contacting the nearest STN Help  
Desk by telephone or via SEND in the STNMAIL file.

=> file stnguide

COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	2.60	181.07

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FILE CONTAINS CURRENT INFORMATION.  
LAST RELOADED: May 4, 2007 (20070504/UP).

<-----User Break----->

=> file caplus		
COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	0.06	181.13

FILE 'CAPLUS' ENTERED AT 15:45:35 ON 10 MAY 2007

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=> s L7 and L8 and L9  
312423 FINE  
688113 LINE  
987 (FINE(W)LINE)  
7181 WRINKLE  
L10 0 L7 AND L8 AND L9

=> s L7 and L8  
312423 FINE  
688113 LINE  
987 (FINE(W)LINE)  
L11 0 L7 AND L8

=> s L7 and L9  
7181 WRINKLE  
L12 0 L7 AND L9

=> file stnguide		
COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	12.53	193.66

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FILE CONTAINS CURRENT INFORMATION.  
LAST RELOADED: May 4, 2007 (20070504/UP).

=> d his

(FILE 'HOME' ENTERED AT 15:38:04 ON 10 MAY 2007)

FILE 'REGISTRY' ENTERED AT 15:38:22 ON 10 MAY 2007

L1 STRUCTURE UPLOADED  
L2 50 S L1  
L3 STRUCTURE UPLOADED  
L4 50 S L3  
L5 6006 S L3 SSS FULL

FILE 'CAPLUS' ENTERED AT 15:43:27 ON 10 MAY 2007  
L6 274 S L5  
L7 212 S L5/THU

FILE 'STNGUIDE' ENTERED AT 15:43:46 ON 10 MAY 2007

FILE 'HCAPLUS' ENTERED AT 15:45:02 ON 10 MAY 2007  
L8 987 S (FINE(W)LINE)  
L9 7181 S WRINKLE

FILE 'STNGUIDE' ENTERED AT 15:45:06 ON 10 MAY 2007

FILE 'HCAPLUS' ENTERED AT 15:45:21 ON 10 MAY 2007

FILE 'STNGUIDE' ENTERED AT 15:45:22 ON 10 MAY 2007

FILE 'CAPLUS' ENTERED AT 15:45:35 ON 10 MAY 2007  
L10 0 S L7 AND L8 AND L9  
L11 0 S L7 AND L8  
L12 0 S L7 AND L9

FILE 'STNGUIDE' ENTERED AT 15:46:01 ON 10 MAY 2007

=> file caplus		
COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	0.06	193.72

FILE 'CAPLUS' ENTERED AT 15:46:44 ON 10 MAY 2007  
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=> s 17 and cosmetic  
59068 COSMETIC  
L13 0 L7 AND COSMETIC

=> s 17 and dermatol?  
7730 DERMATOL?  
L14 0 L7 AND DERMATOL?

=> file stnguide		
COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	4.49	198.21

FILE 'STNGUIDE' ENTERED AT 15:47:10 ON 10 MAY 2007  
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FILE CONTAINS CURRENT INFORMATION.  
LAST RELOADED: May 4, 2007 (20070504/UP).

=> d l7 1-10 ti  
YOU HAVE REQUESTED DATA FROM FILE 'CAPLUS' - CONTINUE? (Y)/N:y

L7 ANSWER 1 OF 212 CAPLUS COPYRIGHT 2007 ACS on STN  
TI Sulfonylpyrrole hydrochloride salts as histone deacetylases inhibitors and their preparation, pharmaceutical compositions and use in the treatment of diseases

L7 ANSWER 2 OF 212 CAPLUS COPYRIGHT 2007 ACS on STN  
TI Novel sulfonylpyrroles as inhibitors of HDAC and their preparation, pharmaceutical compositions and use in the treatment of diseases

L7 ANSWER 3 OF 212 CAPLUS COPYRIGHT 2007 ACS on STN  
TI Pharmaceutical formulations of cyclodextrins and antifungal azole compounds

L7 ANSWER 4 OF 212 CAPLUS COPYRIGHT 2007 ACS on STN  
TI Modulation of TLR-mediated immune responses using adaptor oligonucleotides

L7 ANSWER 5 OF 212 CAPLUS COPYRIGHT 2007 ACS on STN  
TI IL-21 and Toll-like receptor agonist for generating granzyme B-secreting cytotoxic B cells for treatment of B cell-associated cancer, infection, autoimmune and immune disease

L7 ANSWER 6 OF 212 CAPLUS COPYRIGHT 2007 ACS on STN  
TI Adjunctive immunotherapy of mycobacterial infections

L7 ANSWER 7 OF 212 CAPLUS COPYRIGHT 2007 ACS on STN  
TI Combinations containing IKK- $\beta$  inhibitors for the treatment of inflammatory skin diseases or skin cancers

L7 ANSWER 8 OF 212 CAPLUS COPYRIGHT 2007 ACS on STN  
TI Phenols and benzenediols for the sensitization of immune system against haptenized melanoma antigens

L7 ANSWER 9 OF 212 CAPLUS COPYRIGHT 2007 ACS on STN  
TI Administration of a dual toll-like receptor 7 and toll-like receptor 8 agonist protects against influenza in rats

L7 ANSWER 10 OF 212 CAPLUS COPYRIGHT 2007 ACS on STN  
TI Novel tetrahydropyridothiophenes and their preparation, pharmaceutical compositions and use in the treatment of hyperproliferative diseases

<-----User Break----->

=> file hcaplus

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

0.12

202.26

FILE 'HCAPLUS' ENTERED AT 15:48:35 ON 10 MAY 2007  
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FILE COVERS 1907 - 10 May 2007 VOL ISS ISS  
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FILE COVERS 1907 - 10 May 2007 VOL 146 ISS 20  
FILE LAST UPDATED: 1 May 2007 (20070501/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate

=> s hyperpigment?

L15 897 HYPERPIGMENT?

=> s photodamag?

L16 1640 PHOTODAMAG?

=> s skin

L17 255702 SKIN

=> s L7 and L15

COMMAND INTERRUPTED

If this message appears repeatedly, please notify the Help Desk.  
Enter "HELP STN" for information on contacting the nearest STN Help  
Desk by telephone or via SEND in the STNMAIL file.

=> s L7 and L16

COMMAND INTERRUPTED

If this message appears repeatedly, please notify the Help Desk.  
Enter "HELP STN" for information on contacting the nearest STN Help  
Desk by telephone or via SEND in the STNMAIL file.

=> s L7 and L17

COMMAND INTERRUPTED

If this message appears repeatedly, please notify the Help Desk.  
Enter "HELP STN" for information on contacting the nearest STN Help  
Desk by telephone or via SEND in the STNMAIL file.

=> file stnguide

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	2.60	204.86

FILE 'STNGUIDE' ENTERED AT 15:48:41 ON 10 MAY 2007  
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FILE CONTAINS CURRENT INFORMATION.  
LAST RELOADED: May 4, 2007 (20070504/UP).

=> file hcaplus  
COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
0.06	204.92

FULL ESTIMATED COST

FILE 'HCAPLUS' ENTERED AT 15:48:51 ON 10 MAY 2007  
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This file contains CAS Registry Numbers for easy and accurate

=> s L7 and L15

COMMAND INTERRUPTED

If this message appears repeatedly, please notify the Help Desk.  
Enter "HELP STN" for information on contacting the nearest STN Help  
Desk by telephone or via SEND in the STNMAIL file.

=> file caplus  
COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
2.60	207.52

FULL ESTIMATED COST

FILE 'CAPLUS' ENTERED AT 15:48:58 ON 10 MAY 2007  
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Effective October 17, 2005, revised CAS Information Use Policies apply.  
They are available for your review at:



<http://www.cas.org/infopolicy.html>

=> s L7 and L15

897 HYPERPIGMENT?

L18 0 L7 AND L15

=> log hold

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

2.48

210.00

SESSION WILL BE HELD FOR 120 MINUTES

STN INTERNATIONAL SESSION SUSPENDED AT 15:49:09 ON 10 MAY 2007

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:SSPTAEXO1623

PASSWORD:

\* \* \* \* \* RECONNECTED TO STN INTERNATIONAL \* \* \* \* \*

SESSION RESUMED IN FILE 'CAPLUS' AT 15:52:05 ON 10 MAY 2007

FILE 'CAPLUS' ENTERED AT 15:52:05 ON 10 MAY 2007

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COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

2.48

210.00

=> file registry

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

2.48

210.00

FILE 'REGISTRY' ENTERED AT 15:52:12 ON 10 MAY 2007

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PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

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Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 9 MAY 2007 HIGHEST RN 934521-72-9

DICTIONARY FILE UPDATES: 9 MAY 2007 HIGHEST RN 934521-72-9

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH December 2, 2006

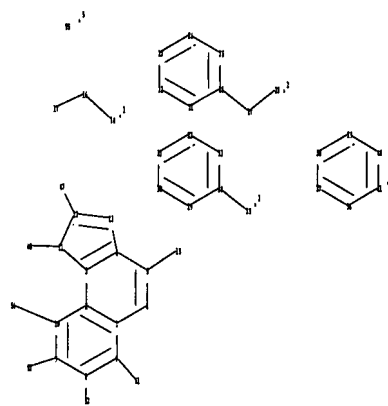
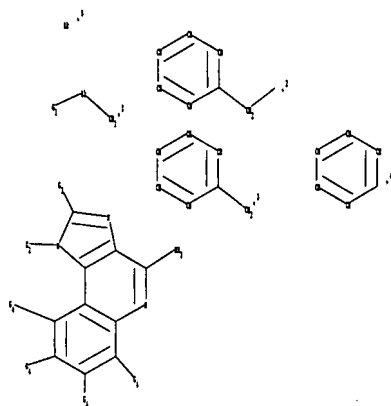
Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stndoc/properties.html>

=>

Uploading C:\Program Files\Stnexp\Queries\10627994generic3.str



chain nodes :

14 15 16 17 27 28 35 46 47 51 52 53 54 55

ring nodes :

1 2 3 4 5 6 7 8 9 10 11 12 13 21 22 23 24 25 26 29 30 31 32  
33 34 36 37 38 39 40 41

chain bonds :

5-15 7-51 8-52 9-53 10-54 11-46 12-47 14-16 16-17 26-27 27-28 34-35

ring bonds :

1-2 1-6 1-7 2-3 2-10 3-4 3-11 4-5 4-13 5-6 7-8 8-9 9-10 11-12 12-13  
21-22 21-26 22-23 23-24 24-25 25-26 29-30 29-34 30-31 31-32 32-33 33-34  
36-37 36-41  
37-38 38-39 39-40 40-41

exact/norm bonds :

3-11 4-13 5-15 7-51 8-52 9-53 10-54 11-12 11-46 12-13 12-47 14-16 16-17

exact bonds :

26-27 27-28 34-35

normalized bonds :

1-2 1-6 1-7 2-3 2-10 3-4 4-5 5-6 7-8 8-9 9-10 21-22 21-26 22-23 23-24

24-25 25-26 29-30 29-34 30-31 31-32 32-33 33-34 36-37 36-41 37-38 38-39  
39-40 40-41

G1:H,O

G2:[\*1],[\*2],[\*3],[\*4],[\*5]

G3:[\*2],[\*3],[\*4],[\*5]

G4:C,H,O

Connectivity :

16:2 X maximum RC ring/chain 55:1 E exact RC ring/chain

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom  
11:Atom 12:Atom 13:Atom 14:CLASS 15:CLASS 16:CLASS 17:CLASS 21:Atom 22:Atom  
23:Atom 24:Atom  
25:Atom 26:Atom 27:CLASS 28:CLASS 29:Atom 30:Atom 31:Atom 32:Atom 33:Atom  
34:Atom 35:CLASS  
36:Atom 37:Atom 38:Atom 39:Atom 40:Atom 41:Atom 46:CLASS 47:CLASS 51:CLASS  
52:CLASS  
53:CLASS 54:CLASS 55:CLASS

Generic attributes :

16:

Saturation : Saturated

L19 STRUCTURE UPLOADED

=> d l19

L19 HAS NO ANSWERS

L19 STR

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

Structure attributes must be viewed using STN Express query preparation.

=> s l19

SAMPLE SEARCH INITIATED 15:52:35 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 540 TO ITERATE

100.0% PROCESSED 540 ITERATIONS

INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*

BATCH \*\*COMPLETE\*\*

PROJECTED ITERATIONS: 9406 TO 12194

PROJECTED ANSWERS: 1198 TO 2322

L20 50 SEA SSS SAM L19

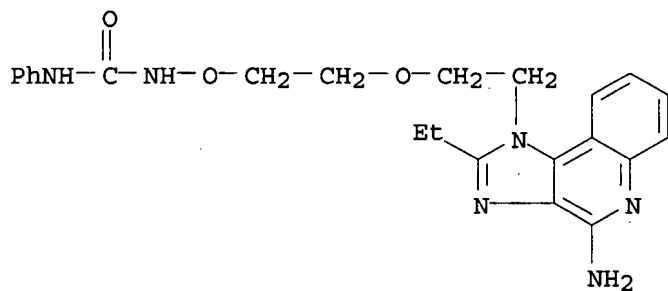
=> d l20 scan

L20 50 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN

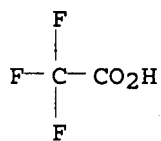
IN Urea, N-[2-[2-(4-amino-2-ethyl-1H-imidazo[4,5-c]quinolin-1-yl)ethoxy]ethoxy]-N'-phenyl-, trifluoroacetate (9CI)

MF C23 H26 N6 O3 . x C2 H F3 O2

CM 1

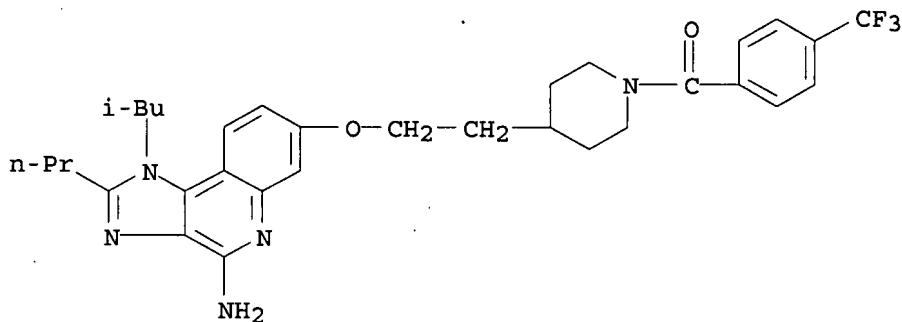


CM 2



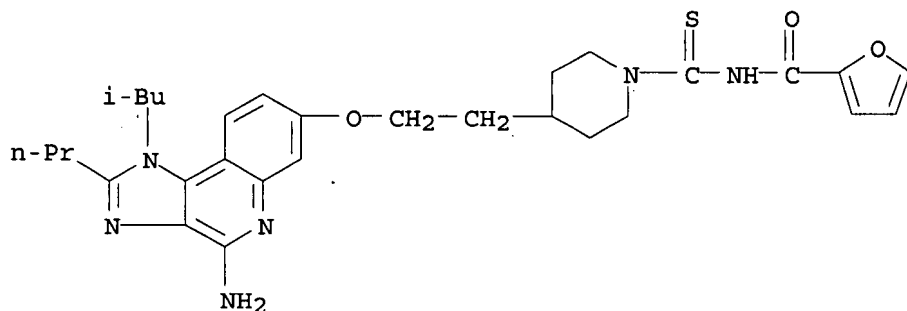
HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):3

L20 50 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN  
IN Piperidine, 4-[2-[[4-amino-1-(2-methylpropyl)-2-propyl-1H-imidazo[4,5-c]quinolin-7-yl]oxy]ethyl]-1-[4-(trifluoromethyl)benzoyl]- (9CI)  
MF C32 H38 F3 N5 O2  
CI COM



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

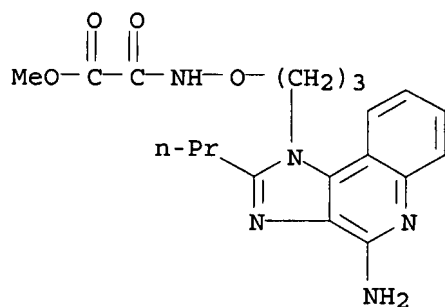
L20 50 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN  
IN 2-Furancarboxamide, N-[[4-[2-[[4-amino-1-(2-methylpropyl)-2-propyl-1H-imidazo[4,5-c]quinolin-7-yl]oxy]ethyl]-1-piperidinyl]thioxomethyl]- (9CI)  
MF C30 H38 N6 O3 S  
CI COM



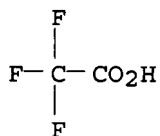
\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L20 50 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN  
 IN Acetic acid, [[3-(4-amino-2-propyl-1H-imidazo[4,5-c]quinolin-1-yl)propoxy]amino]oxo-, methyl ester, trifluoroacetate (9CI)  
 MF C19 H23 N5 O4 . x C2 H F3 O2

CM 1



CM 2



HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0

=> log hold

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

0.90

210.90

SESSION WILL BE HELD FOR 120 MINUTES

STN INTERNATIONAL SESSION SUSPENDED AT 15:53:16 ON 10 MAY 2007

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:SSPTAEXO1623

PASSWORD:

\* \* \* \* \* RECONNECTED TO STN INTERNATIONAL \* \* \* \* \*  
SESSION RESUMED IN FILE 'REGISTRY' AT 15:56:03 ON 10 MAY 2007  
FILE 'REGISTRY' ENTERED AT 15:56:03 ON 10 MAY 2007  
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COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.90	210.90

=>

Uploading

SUPLOAD IS NOT A RECOGNIZED COMMAND

The previous command name entered was not recognized by the system.  
For a list of commands available to you in the current file, enter  
"HELP COMMANDS" at an arrow prompt (=>).

C:\Program Files\Stnexp\Queries\10627994generic4.str

L21 STRUCTURE UPLOADED

=> s l21

SAMPLE SEARCH INITIATED 15:56:27 FILE 'REGISTRY'  
SAMPLE SCREEN SEARCH COMPLETED - 540 TO ITERATE

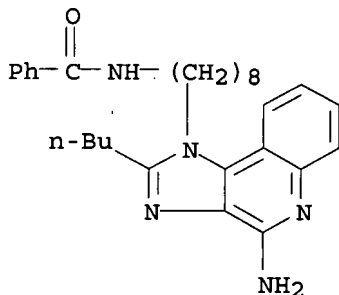
100.0% PROCESSED 540 ITERATIONS 50 ANSWERS  
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)  
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
BATCH \*\*COMPLETE\*\*  
PROJECTED ITERATIONS: 9406 TO 12194  
PROJECTED ANSWERS: 720 TO 1640

L22 50 SEA SSS SAM L21

=> d l22 scan

L22 50 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN  
IN Benzamide, N-[8-(4-amino-2-butyl-1H-imidazo[4,5-c]quinolin-1-yl)octyl]-  
(9CI)  
MF C29 H37 N5 O

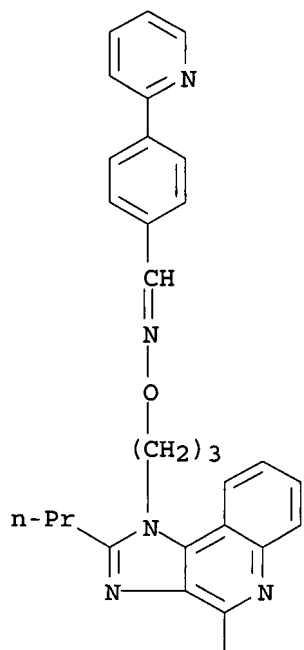


\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):4

L22 50 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN  
IN Benzaldehyde, 4-(2-pyridinyl)-, O-[3-(4-amino-2-propyl-1H-imidazo[4,5-c]quinolin-1-yl)propyl]oxime (9CI)  
MF C28 H28 N6 O  
CI COM

PAGE 1-A



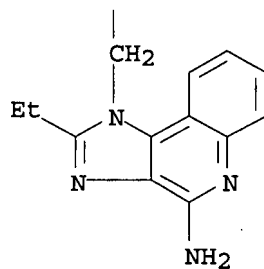
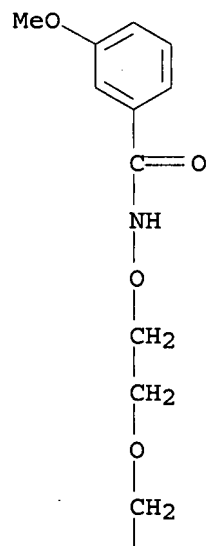
PAGE 2-A



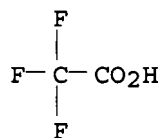
\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L22 50 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN  
IN Benzamide, N-[2-[2-(4-amino-2-ethyl-1H-imidazo[4,5-c]quinolin-1-yl)ethoxy]ethoxy]-3-methoxy-, trifluoroacetate (9CI)  
MF C24 H27 N5 O4 . x C2 H F3 O2

CM 1



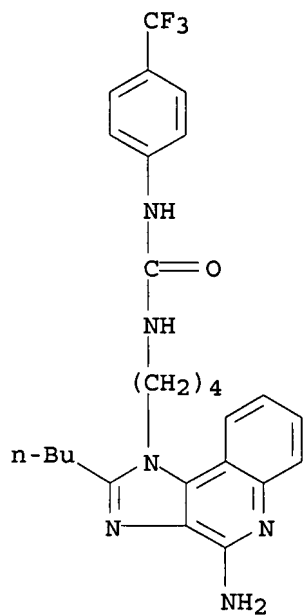
CM 2



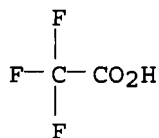
L22 50 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN  
 IN Urea, N-[4-(4-amino-2-butyl-1H-imidazo[4,5-c]quinolin-1-yl)butyl]-N'-[4-(trifluoromethyl)phenyl]-, mono(trifluoroacetate) (9CI)  
 MF C26 H29 F3 N6 O . C2 H F3 O2

CM 1

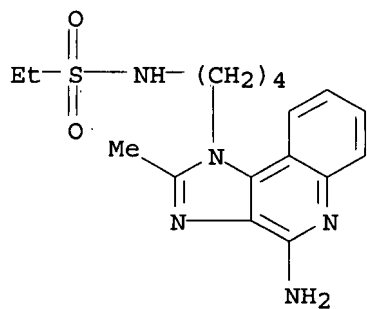




CM 2



L22 50 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN  
 IN Ethanesulfonamide, N-[4-(4-amino-2-methyl-1H-imidazo[4,5-c]quinolin-1-yl)butyl]- (9CI)  
 MF C17 H23 N5 O2 S



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0

=> s l21 sss full

FULL SEARCH INITIATED 15:57:20 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 11198 TO ITERATE

100.0% PROCESSED 11198 ITERATIONS

1261 ANSWERS

SEARCH TIME: 00.00.01

L23 1261 SEA SSS FUL L21

=> file stnguide

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

173.45

383.45

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FILE CONTAINS CURRENT INFORMATION.

LAST RELOADED: May 4, 2007 (20070504/UP).

=> file hcaplus

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

0.06

383.51

FILE 'HCAPLUS' ENTERED AT 15:58:20 ON 10 MAY 2007

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=> s L22

L24 26 L22

=> s dermatol?

L25 7730 DERMATOL?

=> s cosmetic

L26 59068 COSMETIC

=> s (fine(w)line)

312423 FINE  
688113 LINE  
L27 987 (FINE(W)LINE)

=> s wrinkle

L28 7181 WRINKLE

=> s skin

L29 255702 SKIN

=> file stnguide

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	2.60	386.11

FILE 'STNGUIDE' ENTERED AT 15:58:27 ON 10 MAY 2007  
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FILE CONTAINS CURRENT INFORMATION.  
LAST RELOADED: May 4, 2007 (20070504/UP).

=> file hcaplus

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.06	386.17

FILE 'HCAPLUS' ENTERED AT 15:59:08 ON 10 MAY 2007  
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FILE LAST UPDATED: 1 May 2007 (20070501/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate

=> s L24 and (L25 or L26 or L29)

L30 0 L24 AND (L25 OR L26 OR L29)

=> s L24 and (L27 or L28)

L31 0 L24 AND (L27 OR L28)

=> file stnguide

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	2.60	388.77

FILE 'STNGUIDE' ENTERED AT 15:59:11 ON 10 MAY 2007  
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FILE CONTAINS CURRENT INFORMATION.  
LAST RELOADED: May 4, 2007 (20070504/UP).

=> d l24 1-26 ti

YOU HAVE REQUESTED DATA FROM FILE 'HCAPLUS' - CONTINUE? (Y)/N:y

- L24 ANSWER 1 OF 26 HCAPLUS COPYRIGHT 2007 ACS on STN  
TI Preparation of hydroxylamine and oxime substituted imidazoquinolines, imidazopyridines, and imidazonaphthyridines as inducers of cytokine biosynthesis for treatment of viral and neoplastic diseases
- L24 ANSWER 2 OF 26 HCAPLUS COPYRIGHT 2007 ACS on STN  
TI Preparation of hydroxylamine substituted imidazo-containing compounds as inducers of cytokine biosynthesis for treatment of viral and neoplastic disease
- L24 ANSWER 3 OF 26 HCAPLUS COPYRIGHT 2007 ACS on STN  
TI Preparation of oxime substituted imidazo-containing compounds as inducers of cytokine biosynthesis for treatment of viral and neoplastic disease
- L24 ANSWER 4 OF 26 HCAPLUS COPYRIGHT 2007 ACS on STN  
TI Compositions for encapsulation and controlled release prepared by matrix crosslinking with multivalent cations
- L24 ANSWER 5 OF 26 HCAPLUS COPYRIGHT 2007 ACS on STN  
TI Preparation of sulfonamide substituted imidazoquinolines as immunomodulators
- L24 ANSWER 6 OF 26 HCAPLUS COPYRIGHT 2007 ACS on STN  
TI Preparation of sulfonamide substituted imidazoquinolines as immunomodulators
- L24 ANSWER 7 OF 26 HCAPLUS COPYRIGHT 2007 ACS on STN  
TI Delivery of immune response modifier compounds
- L24 ANSWER 8 OF 26 HCAPLUS COPYRIGHT 2007 ACS on STN  
TI Delivery of immune response modifier compounds using metal-containing particulate support materials
- L24 ANSWER 9 OF 26 HCAPLUS COPYRIGHT 2007 ACS on STN  
TI Selective activation of cellular activities mediated through a common TOLL-like receptor
- L24 ANSWER 10 OF 26 HCAPLUS COPYRIGHT 2007 ACS on STN  
TI Methods and compositions related to IRM compounds and toll-like receptor 8
- L24 ANSWER 11 OF 26 HCAPLUS COPYRIGHT 2007 ACS on STN  
TI Preparation of aryl/heteroaryl substituted imidazoquinolines as immunomodulators
- L24 ANSWER 12 OF 26 HCAPLUS COPYRIGHT 2007 ACS on STN

TI Preparation of imidazoquinolinesulfonamides as inducers of cytokine biosynthesis.

L24 ANSWER 13 OF 26 HCAPLUS COPYRIGHT 2007 ACS on STN  
 TI Preparation of aryl ether substituted imidazoquinolines as immune response modifiers

L24 ANSWER 14 OF 26 HCAPLUS COPYRIGHT 2007 ACS on STN  
 TI Preparation of amido ether substituted imidazoquinolines as immune response modifiers

L24 ANSWER 15 OF 26 HCAPLUS COPYRIGHT 2007 ACS on STN  
 TI Preparation of amidoimidazo[4,5-c]quinolines as immune response modifiers

L24 ANSWER 16 OF 26 HCAPLUS COPYRIGHT 2007 ACS on STN  
 TI Preparation of sulfonamidoalkoxyalkylimidazoquinolines as immune response modulators.

L24 ANSWER 17 OF 26 HCAPLUS COPYRIGHT 2007 ACS on STN  
 TI Preparation of 4-amino-1-(ureidoethoxyethyl)imidazoquinolines as inducers of cytokine biosynthesis for treatment of viral and neoplastic disease.

L24 ANSWER 18 OF 26 HCAPLUS COPYRIGHT 2007 ACS on STN  
 TI Preparation of imidazoquinolinamines as immune response modifiers.

L24 ANSWER 19 OF 26 HCAPLUS COPYRIGHT 2007 ACS on STN  
 TI Toll-like receptor (TLR) pathway-based methods for identification of immune response modifier (IRM) compounds, and methods of use of such compounds

L24 ANSWER 20 OF 26 HCAPLUS COPYRIGHT 2007 ACS on STN  
 TI Preparation of thioether substituted imidazoquinolinamines as cytokine biosynthesis inducers for treatment of viral and neoplastic disease.

L24 ANSWER 21 OF 26 HCAPLUS COPYRIGHT 2007 ACS on STN  
 TI Preparation of 1-(alkyl- or arylthioalkyl) imidazo[4,5-c]quinoline-4- amines and analogs as cytokine biosynthesis inducers

L24 ANSWER 22 OF 26 HCAPLUS COPYRIGHT 2007 ACS on STN  
 TI Preparation of urea substituted imidazoquinoline ethers as immune response modifiers

L24 ANSWER 23 OF 26 HCAPLUS COPYRIGHT 2007 ACS on STN  
 TI Preparation of sulfonamido ether substituted imidazoquinolines as immune response modifiers

L24 ANSWER 24 OF 26 HCAPLUS COPYRIGHT 2007 ACS on STN  
 TI Preparation of aryl ether substituted imidazoquinolines as immune response modifiers

L24 ANSWER 25 OF 26 HCAPLUS COPYRIGHT 2007 ACS on STN  
 TI Preparation of amido ether substituted imidazoquinolines as immune response modifiers

L24 ANSWER 26 OF 26 HCAPLUS COPYRIGHT 2007 ACS on STN  
 TI Preparation of urea substituted imidazoquinolines as immune response modifiers

=> file hcaplus  
 COST IN U.S. DOLLARS  
 FULL ESTIMATED COST

SINCE FILE	TOTAL
ENTRY	SESSION
0.12	400.39

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FILE LAST UPDATED: 9 May 2007 (20070509/ED)  
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FILE COVERS 1907 - 10 May 2007 VOL 146 ISS 20  
FILE LAST UPDATED: 1 May 2007 (20070501/ED)

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4726688 AY<2004  
23932369 PY<2004  
4203011 PRY<2004

L32 26 L24 AND (AY<2004 OR PY<2004 OR PRY<2004)

=> file stnguide

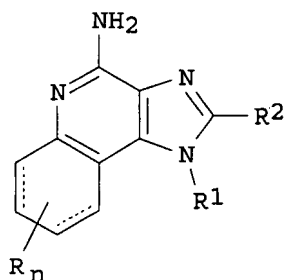
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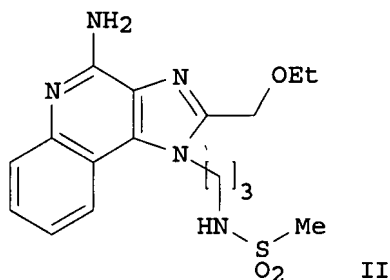
FILE CONTAINS CURRENT INFORMATION.  
LAST RELOADED: May 4, 2007 (20070504/UP).

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L24 ANSWER 5 OF 26 HCAPLUS COPYRIGHT 2007 ACS on STN  
TI Preparation of sulfonamide substituted imidazoquinolines as  
immunomodulators  
GI



I



II

AB The title imidazoquinoline and tetrahydroimidazoquinoline compds. I [R1 = alkyl-NR3-SO2-X-R4, alkenyl-NR3-SO2-X-R4, alkyl-NR6-SO2-R7; X = a bond, NR5; R4 = (un)substituted aryl, heteroaryl, heterocyclyl, alkyl, alkenyl; R2 = H, alkyl, alkenyl, aryl, etc.; R3 = H, alkyl; R5 = H, alkyl; or R4 and R5 can combine to form (un)substituted 3-7 membered heterocyclic ring; R6 = H, alkyl; R7 = H, alkyl; R6 and R7 combine to form (un)substituted heterocyclic ring; n = 0-4; R = alkyl, alkoxy, halo, CF3] that contain sulfonamide functionality at the 1-position are useful as immune response modifiers. Thus, reacting 1-(3-aminopropyl)-2-(ethoxymethyl)-1H-imidazo[4,5-c]quinolin-4-amine with methanesulfonic anhydride in the presence of Et3N in MeCN afforded II. The title compds. I were tested for interferon  $\alpha$  and TNF $\alpha$  induction in human cells (data given for over 30 compds.). The compds. and compns. of the invention can induce the biosynthesis of various cytokines and are useful in the treatment of a variety of conditions including viral diseases and neoplastic diseases.

AN 2005:29289 HCAPLUS <<LOGINID::20070510>>

DN 142:134599

TI Preparation of sulfonamide substituted imidazoquinolines as immunomodulators

IN Griesgraber, George W.

PA 3M Innovative Properties Company, USA

SO PCT Int. Appl., 58 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 2

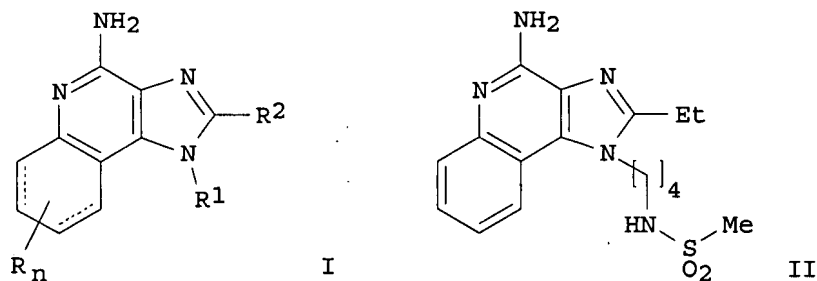
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PI	WO 2005003065	A2	20050113	WO 2004-US20607	20040625
	WO 2005003065	A3	20050310		
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	RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	AU 2004253929	A1	20050113	AU 2004-253929	20040625
	CA 2529322	A1	20050113	CA 2004-2529322	20040625
	EP 1638566	A2	20060329	EP 2004-756208	20040625
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK				
	CN 1812789	A	20060802	CN 2004-80018145	20040625
	BR 2004011916	A	20060815	BR 2004-11916	20040625
PRAI	US 2003-483200P	P	20030627		
	WO 2004-US20607	W	20040625		

OS MARPAT 142:134599

L24 ANSWER 6 OF 26 HCAPLUS COPYRIGHT 2007 ACS on STN

TI Preparation of sulfonamide substituted imidazoquinolines as immunomodulators

GI



AB The title 1-imidazoquinoline and tetrahydroimidazoquinoline compds. I [R1 = alkyl-NR3-SO2-X-R4, alkenyl-NR3-SO2-X-R4, alkyl-NR6-SO2-R7; X = a bond, NR5; R4 = (un)substituted aryl, heteroaryl, heterocyclyl, alkyl, alkenyl; R2 = H, alkyl, alkenyl, aryl, etc.; R3 = H, alkyl; R5 = H, alkyl; or R4 and R5 can combine to form (un)substituted 3-7 membered heterocyclic ring; R6 = H, alkyl; R7 = H, alkyl; R6 and R7 combine to form (un)substituted heterocyclic ring; n = 0-4; R = alkyl, alkoxy, halo, CF3] that contain sulfonamide functionality at the 1-position are useful as immune response modifiers. E.g., a multi-step synthesis of II, starting from tert-Bu 4-(2-ethyl-1H-imidazo[4,5-c]quinolin-1-yl)butylcarbamate, was given. The title compds. I were tested for interferon  $\alpha$  and TNF $\alpha$  induction in human cells (data given for over 30 compds.). The compds. and compns. of the invention can induce the biosynthesis of various cytokines and are useful in the treatment of a variety of conditions including viral diseases and neoplastic diseases.

AN 2005:29288 HCAPLUS <<LOGINID::20070510>>

DN 142:114068

TI Preparation of sulfonamide substituted imidazoquinolines as immunomodulators

IN Lindstrom, Kyle J.

PA 3M Innovative Properties Company, USA

SO PCT Int. Appl., 58 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2005003064	A2	20050113	WO 2004-US20606	20040625
	WO 2005003064	A3	20050331		
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SN, TD, TG  
PRAI US 2003-483200P P 20030627  
OS MARPAT 142:114068

L24 ANSWER 9 OF 26 HCAPLUS COPYRIGHT 2007 ACS on STN  
TI Selective activation of cellular activities mediated through a common  
TOLL-like receptor  
AB Methods of identifying compds. that selectively modulate cellular  
activities mediated by a common TLR are provided. Generally, the methods  
include providing an assay to detect modulation of a first cellular  
activity mediated by a TLR; providing an assay to detect modulation of a  
second cellular activity mediated by the TLR; performing each assay using  
a test compound; and identifying the test compound as a compound that  
selectively modulates at least one cellular activity of a plurality of  
activities mediated by a common TLR if the test compound modulates the first  
cellular activity to a different extent than it modulates the second  
TLR-mediated cellular activity. Compds. identified by such methods,  
pharmaceutical compns. including such compds., and methods of treating a  
condition by administering such pharmaceutical compns. to a subject are  
also provided.

AN 2004:802451 HCAPLUS <<LOGINID::20070510>>  
DN 141:289086

TI Selective activation of cellular activities mediated through a common  
TOLL-like receptor

IN Fink, Jason R.; Gupta, Shalley K.  
PA 3M Innovative Properties Company, USA  
SO U.S. Pat. Appl. Publ., 14 pp.  
CODEN: USXXCO

DT Patent  
LA English

FAN.CNT 1

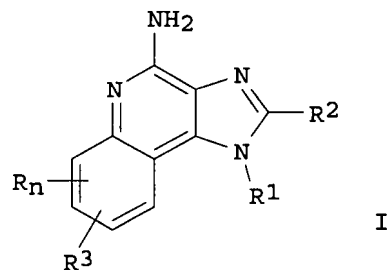
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PI	US 2004191833	A1	20040930	US 2004-807934	20040324
	WO 2004087049	A2	20041014	WO 2004-US8979	20040324
	WO 2004087049	A3	20041229		
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	RW:	BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
	EP 1613956	A2	20060111	EP 2004-758260	20040324
	R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK			
	JP 2006523452	T	20061019	JP 2006-507525	20040324
PRAI	US 2003-457336P	P	20030325		
	WO 2004-US8979	W	20040324		

L24 ANSWER 10 OF 26 HCAPLUS COPYRIGHT 2007 ACS on STN  
TI Methods and compositions related to IRM compounds and toll-like receptor 8  
AB Methods of eliciting a toll-like receptor 8 (TLR8)-mediated cellular  
response are disclosed. Such methods include administration of either a  
TLR8 agonist or a TLR8 antagonist to an IRM (immune response  
modifier)-responsive cell so that the IRM compound affects at least one  
TLR8-mediate cellular signaling pathway. In some cases, the method may  
provide prophylactic or therapeutic treatment for a condition treatable by  
modulating a TLR8-mediated cellular pathway.  
AN 2004:681403 HCAPLUS <<LOGINID::20070510>>

DN 141:185096  
 TI Methods and compositions related to IRM compounds and toll-like receptor 8  
 IN Gorden, Keith B.; Qiu, Xiaohong; Vasilakos, John P.  
 PA 3M Innovative Properties Company, USA  
 SO U.S. Pat. Appl. Publ., 25 pp.  
 CODEN: USXXCO  
 DT Patent  
 LA English  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2004162309	A1	20040819	US 2004-777310	20040212
	WO 2004071459	A2	20040826	WO 2004-US4353	20040212
	WO 2004071459	A3	20050127		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	EP 1592302	A2	20051109	EP 2004-710701	20040212
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
	JP 2006517974	T	20060803	JP 2006-503575	20040212
PRAI	US 2003-447179P	P	20030213		
	WO 2004-US4353	W	20040212		

L24 ANSWER 11 OF 26 HCAPLUS COPYRIGHT 2007 ACS on STN  
 TI Preparation of aryl/heteroaryl substituted imidazoquinolines as immunomodulators  
 GI



AB Title compds. I (R = alkyl, alkoxy, OH, CF<sub>3</sub>; n = 0, 1; R<sub>1</sub>, R<sub>2</sub> = H, non-interfering substituent; R<sub>3</sub> = ArZ, aminosulfonylaryl, aminocarbonylaryl, etc.; Ar = aryl, heteroaryl; Z = bond, alkylene, alkenylene, alkynylene) which are immunomodulators, inducing cytokines biosynthesis, and inhibiting tumor necrosis factors biosynthesis, are prepared. For example, 2-butyl-1-isobutyl-7-(thiophen-3-yl)-1H-imidazo[4,5-c]quinolin-4-amine was prepared in a multi-step synthesis starting from 3-bromoaniline, tri-Et orthoformate, and Meldrum's acid. I are useful in the treatment of viral and neoplastic diseases.

AN 2004:566606 HCAPLUS <<LOGINID::20070510>>  
 DN 141:123628  
 TI Preparation of aryl/heteroaryl substituted imidazoquinolines as immunomodulators  
 IN Hays, David S.; Niwas, Shri; Kshirsagar, Tushar; Ghosh, Tarun K.; Gupta, Shalley K.; Heppner, Philip D.; Merrill, Bryon A.; Bonk, Jason D.;

Danielson, Michael E.; Gerster, John F.; Haraldson, Chad A.; Johannessen, Sarah C.; Kavanagh, Maureen A.; Lindstrom, Kyle J.; Prince, Ryan B.; Radmer, Matthew R.; Rice, Michael J.; Squire, David J.; Strong, Sarah A.; Wurst, Joshua R.

PA 3M Innovative Properties Company, USA

SO PCT Int. Appl., 465 pp.

CODEN: PIXXD2

DT Patent

LA English

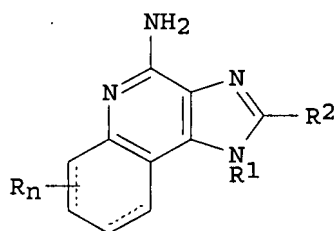
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004058759	A1	20040715	WO 2003-US40373	20031218
	WO 2004058759	A8	20050317		
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	CA 2510375	A1	20040715	CA 2003-2510375	20031218
	AU 2003301052	A1	20040722	AU 2003-301052	20031218
	US 2004147543	A1	20040729	US 2003-739787	20031218
	US 7091214	B2	20060815		
	EP 1590348	A1	20051102	EP 2003-814164	20031218
	R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK			
	CN 1747953	A	20060315	CN 2003-80109659	20031218
	JP 2006513212	T	20060420	JP 2004-563764	20031218
	US 2006111387	A1	20060525	US 2006-275553	20060113
PRAI	US 2002-435889P	P	20021220		
	US 2003-516331P	P	20031031		
	US 2003-739787	A3	20031218		
	WO 2003-US40373	W	20031218		
OS	MARPAT 141:123628				

L24 ANSWER 12 OF 26 HCAPLUS COPYRIGHT 2007 ACS on STN

TI Preparation of imidazoquinolinesulfonamides as inducers of cytokine biosynthesis.

GI



AB Title compds. [I; R1 = alkyl-NR3SO2XR4, alkenyl-NR3SO2XR4; X = bond, R5; R4 = (substituted) aryl, heteroaryl, heterocyclyl, alkyl, alkenyl; R2 = H, (substituted) alkyl, alkenyl, aryl, heteroaryl, alkyl-O-alkyl, alkyl-O-alkenyl; R3 = H, alkyl; R5 = H, alkyl; R4R5 = atoms to form a 3-7 membered (substituted) heterocyclyl; n = 0-4; R = alkyl, alkoxy, halo, CF3], were prepared Thus, a stirred solution of 4-chloro-3-nitroquinoline in

CH<sub>2</sub>Cl<sub>2</sub> was treated with Et<sub>3</sub>N and 1,2-diamino-2-methylpropane to give 2-methyl-N1-(3-nitroquinolin-4-yl)propane-1,2-diamine. A solution of the latter in THF was cooled to 0° and treated with a 1 N NaOH solution of di-tert-Bu dicarbonate under rapid stirring followed by warming to ambient temperature and stirring overnight; addnl. di-tert-Bu dicarbonate was added and stirring was continued for 3 d. to give tert-Bu 1,1-dimethyl-2-[(3-nitroquinolin-4-yl)amino]ethylcarbamate. This in PhMe was treated with Pt/C and shaken under H<sub>2</sub> for 6 h to give tert-Bu 2-(3-aminoquinolin-4-yl)-1,1-dimethylethylcarbamate. The aminoquinoline in CH<sub>2</sub>Cl<sub>2</sub> was cooled to 0° and treated with Et<sub>3</sub>N and ethoxyacetyl chloride to give a syrup which was refluxed overnight with Et<sub>3</sub>N in EtOH to give tert-Bu 2-[2-(ethoxymethyl)-1H-imidazo[4,5-c]quinolin-1-yl]-1,1-dimethylethylcarbamate. The imidazoquinoline in CH<sub>2</sub>Cl<sub>2</sub> was treated with 3-chloroperoxybenzoic acid and stirred 2 h to give tert-Bu 2-[2-(ethoxymethyl)-5-oxido-1H-imidazo[4,5-c]quinolin-1-yl]-1,1-dimethylethylcarbamate. The latter in 1,2-dichloroethane was heated to 70° and treated with concentrated NH<sub>4</sub>OH; p-toluenesulfonyl chloride was added and the reaction mixture was heated in a sealed tube for 2 h to give tert-Bu 2-[4-amino-2-(ethoxymethyl)-1H-imidazo[4,5-c]quinolin-1-yl]-1,1-dimethylethylcarbamate. This was refluxed in EtOH containing HCl for 2 h to give 1-(2-amino-2-methylpropyl)-2-(ethoxymethyl)-1H-imidazo[4,5-c]quinolin-4-amine. 1-(2-Amino-2-methylpropyl)-2-(ethoxymethyl)-1H-imidazo[4,5-c]quinolin-4-amine in CH<sub>2</sub>Cl<sub>2</sub> at 0° was treated with Et<sub>3</sub>N and MeSO<sub>2</sub>Cl and the reaction was allowed to warm to ambient temperature overnight

to

give N-[2-[4-amino-2-(ethoxymethyl)-1H-imidazo[4,5-c]quinolin-1-yl]-1,1-dimethylethyl]methanesulfonamide (claimed compound). I induced interferon in an in vitro human blood cell system at lowest effective concns. of 0.0001-10 µM.

AN 2004:33981 HCAPLUS <<LOGINID::20070510>>

DN 140:94043

TI Preparation of imidazoquinolinesulfonamides as inducers of cytokine biosynthesis.

IN Griesgraber, George W.

PA 3M Innovative Properties Company, USA

SO U.S., 86 pp., Cont. of U.S. Ser. No. 27,273, abandoned.

CODEN: USXXAM

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6677349	B1	20040113	US 2003-425054	20030428
	US 2004106638	A1	20040603	US 2003-669051	20030923
	US 6924293	B2	20050802		
	US 2004132762	A1	20040708	US 2003-734306	20031212
	US 6888000	B2	20050503		
	US 2005197358	A1	20050908	US 2005-101369	20050407
	US 7199131	B2	20070403		
PRAI	US 2001-27273	B1	20011221		
	US 2003-425054	A1	20030428		
	US 2003-669051	A1	20030923		

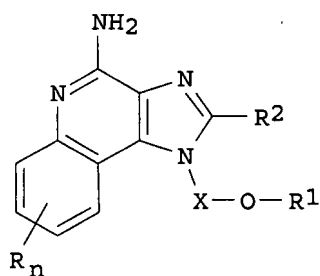
OS MARPAT 140:94043

RE.CNT 63 THERE ARE 63 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L24 ANSWER 13 OF 26 HCAPLUS COPYRIGHT 2007 ACS on STN

TI Preparation of aryl ether substituted imidazoquinolines as immune response modifiers

GI



AB The title compds. [I; X = (CH<sub>2</sub>)<sub>2</sub>, CH<sub>2</sub>CH<sub>2</sub>, etc.; R<sub>1</sub> = alkenyl, aryl, R<sub>4</sub>-aryl; R<sub>2</sub> = H, alkyl, alkenyl, etc.; R<sub>4</sub> = alkyl, alkenyl which may be interrupted by one or more O atoms; R<sub>3</sub> = H, alkyl; n = 0-4; R = alkyl, alkoxy, OH, etc.] that contain ether and aryl or alkenyl functionality at the 1-position, and are useful as immune response modifiers, were prepared E.g., a multi-step synthesis of I [X = (CH<sub>2</sub>)<sub>2</sub>; R<sub>1</sub> = CH<sub>2</sub>C.tplbond.CH; R<sub>2</sub> = H; n = 0] which showed the lowest effective concentration of 0.12 μM and 1.11 μM to induce biosynthesis of interferon α and TNFα in human cells, resp., was given. The compds. I can induce the biosynthesis of various cytokines and are useful in the treatment of a variety of conditions including viral diseases and neoplastic diseases. The pharmaceutical composition comprising the compound I is claimed.

AN 2003:892446 HCAPLUS <<LOGINID::20070510>>

DN 139:364934

TI Preparation of aryl ether substituted imidazoquinolines as immune response modifiers

IN Heppner, Philip D.; Charles, Leslie J.; Dellaria, Joseph F.; Merrill, Bryon A.; Mickelson, John W.

PA 3M Innovative Properties Co., USA

SO U.S. Pat. Appl. Publ., 97 pp., Cont.-in-part of U.S. Ser. No. 13,202. CODEN: USXXCO

DT Patent

LA English

FAN.CNT 11

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2003212092	A1	20031113	US 2002-165750	20020607
	US 6677348	B2	20040113		
	US 2003212091	A1	20031113	US 2001-13202	20011206
	US 6670372	B2	20031230		
	EP 1541572	A1	20050615	EP 2005-4019	20011206
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, LT, LV, FI, CY, TR				
	US 2004072858	A1	20040415	US 2003-675833	20030930
	US 2004106640	A1	20040603	US 2003-696753	20031029
	US 6953804	B2	20051011		
	US 2004138248	A1	20040715	US 2003-696108	20031029
	US 6989389	B2	20060124		
	US 2005148619	A1	20050707	US 2005-69033	20050228
	US 7132429	B2	20061107		
	US 2005209267	A1	20050922	US 2005-132537	20050519
	US 2005234088	A1	20051020	US 2005-132900	20050519
PRAI	US 2000-254218P	P	20001208		
	US 2001-13202	A2	20011206		
	EP 2001-987297	A3	20011206		
	US 2001-11921	A1	20011206		
	US 2001-12599	A1	20011206		
	US 2001-13059	A1	20011206		
	US 2001-13060	A1	20011206		
	US 2002-165750	A1	20020607		

US 2003-680989 A3 20031007  
 US 2003-696476 A3 20031029  
 US 2003-696684 A3 20031029

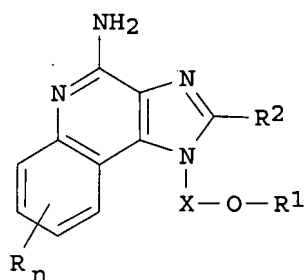
OS MARPAT 139:364934

RE.CNT 60 THERE ARE 60 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L24 ANSWER 14 OF 26 HCAPLUS COPYRIGHT 2007 ACS on STN

TI Preparation of amido ether substituted imidazoquinolines as immune  
 response modifiers

GI



AB The title compds. [I; X = (CH<sub>2</sub>)<sub>2</sub>, CH(Et)CH<sub>2</sub>, etc.; R<sub>1</sub> = (CH<sub>2</sub>)<sub>4</sub>CONMePh, (CH<sub>2</sub>)<sub>2</sub>NHCO(cyclohexyl), (CH<sub>2</sub>)<sub>2</sub>NHCO(1-naphthyl), etc.; R<sub>2</sub> = H, alkyl, alkenyl, etc.; R = alkyl, alkoxy, OH, halo, CF<sub>3</sub>; n = 0-4] and their pharmaceutically acceptable salts that contain ether and amide functionality at the 1-position, and are useful as immune response modifiers, were prepared. Thus, reacting 2-(1H-imidazo[4,5-c]quinolin-1-yl)ethanol with 5-bromo-N-methyl-N-phenylpentamide followed by treatment of the resulting N-oxide with trichloroacetyl isocyanate in CH<sub>2</sub>Cl<sub>2</sub>, and then treating the intermediate with NaOMe in MeOH afforded I [X = (CH<sub>2</sub>)<sub>2</sub>; R<sub>1</sub> = (CH<sub>2</sub>)<sub>4</sub>CONMePh; R<sub>2</sub> = H; n = 0] which showed interferon α induction in human cells at 3.33 μM. The compds. I and compns. comprising I can induce the biosynthesis of various cytokines, and are useful in the treatment of a variety of conditions, including viral diseases and neoplastic diseases.

AN 2003:777397 HCAPLUS <<LOGINID::20070510>>

DN 139:292250

TI Preparation of amido ether substituted imidazoquinolines as immune  
 response modifiers

IN Crooks, Stephen L.; Griesgraber, George W.; Heppner, Philip D.; Merrill,  
 Bryon A.

PA 3M Innovative Properties Co., USA

SO U.S. Pat. Appl. Publ., 50 pp., Cont.-in-part of U.S. Ser. No. 11,670.  
 CODEN: USXXCO

DT Patent

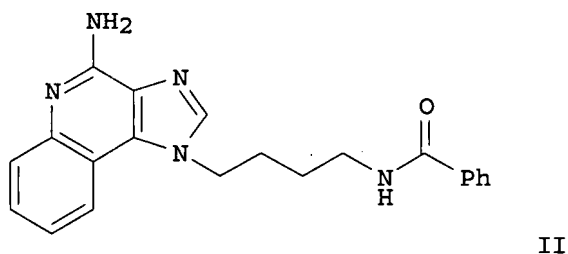
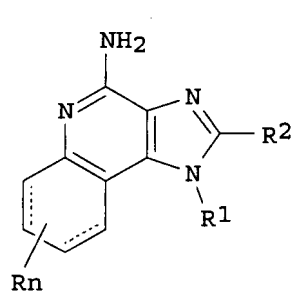
LA English

FAN.CNT 11

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2003187016	A1	20031002	US 2002-165449	20020607
	US 6664265	B2	20031216		
	US 2003096835	A1	20030522	US 2001-11670	20011206
	US 6660747	B2	20031209		
	EP 1541572	A1	20050615	EP 2005-4019	20011206
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, LT, LV, FI, CY, TR				
	US 2004072858	A1	20040415	US 2003-675833	20030930
	US 2004067975	A1	20040408	US 2003-681711	20031007

US 2004157874	A1	20040812	US 2003-681457	20031007
US 2005143413	A1	20050630	US 2005-68207	20050228
US 7115622	B2	20061003		
US 2005148619	A1	20050707	US 2005-69033	20050228
US 7132429	B2	20061107		
US 2005209267	A1	20050922	US 2005-132537	20050519
US 2005234088	A1	20051020	US 2005-132900	20050519
PRAI US 2000-254218P	P	20001208		
US 2001-11670	A2	20011206		
EP 2001-987297	A3	20011206		
US 2001-11921	A1	20011206		
US 2001-12599	A1	20011206		
US 2001-13059	A1	20011206		
US 2001-13060	A1	20011206		
US 2002-165449	A1	20020607		
US 2003-680989	A3	20031007		
US 2003-681711	A1	20031007		
US 2003-696476	A3	20031029		
US 2003-696684	A3	20031029		
OS MARPAT 139:292250				

L24 ANSWER 15 OF 26 HCAPLUS COPYRIGHT 2007 ACS on STN  
 TI Preparation of amidoimidazo[4,5-c]quinolines as immune response modifiers  
 GI



AB Title compds. I [wherein R1 = alkyl-NR3COR4; R3 = independently H, alkyl or (un)substituted alkyl(hetero)aryl; R4 = alkyl or (un)substituted (hetero)aryl; R2 = H, alkenyl, (un)substituted alkyl or (hetero)aryl, etc.; R = independently alkyl, alkoxy, halo, CF3; n = 0-4; and their pharmaceutically acceptable salts] were prepared as immune response modifiers. For example, II was prepared by acylation of 1-(4-aminobutyl)-1H-imidazo[4,5-c]quinolin-4-amine with benzoyl chloride in pyridine. II induced interferon  $\alpha$  and TNF $\alpha$  at concns. of 0.37  $\mu$ M and 10  $\mu$ M, resp., in human cells. Thus, I and their pharmaceutical compns. are useful for the treatment of a variety of conditions including viral diseases and neoplastic diseases (no data).

AN 2003:590833 HCAPLUS <<LOGINID::20070510>>  
 DN 139:149629  
 TI Preparation of amidoimidazo[4,5-c]quinolines as immune response modifiers  
 IN Coleman, Patrick L.; Crooks, Stephen L.; Griesgraber, George W.; Lindstrom, Kyle J.; Merrill, Bryon A.; Rice, Michael J.  
 PA 3M Innovative Properties Co., USA  
 SO U.S. Pat. Appl. Publ., 85 pp., Cont.-in-part of U.S. 6,451,810.  
 CODEN: USXXCO  
 DT Patent  
 LA English  
 FAN.CNT 7

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	US 2003144283	A1	20030731	US 2001-27218	20011221
	US 6756382	B2	20040629		
	US 6451810	B1	20020917	US 2000-589580	20000607
	TR 200103574	T2	20020821	TR 2001-3574	20000608
	HU 200202254	A2	20021028	HU 2002-2254	20000608
	EP 1438958	A1	20040721	EP 2004-4588	20000608
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, CY				
	EP 1642580	A1	20060405	EP 2005-21837	20000608
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL				
	AT 335479	T	20060915	AT 2000-950215	20000608
	ZA 2001009854	A	20030228	ZA 2001-9854	20011129
	ZA 2001009857	A	20030228	ZA 2001-9857	20011129
	ZA 2001009861	A	20030228	ZA 2001-9861	20011129
	US 2004029877	A1	20040212	US 2001-27272	20011221
	US 6800624	B2	20041005		
	US 2004204438	A1	20041014	US 2004-826836	20040416
	US 7030131	B2	20060418		
	US 2004229897	A1	20041118	US 2004-848893	20040519
	US 2006106052	A1	20060518	US 2006-275699	20060125
PRAI	US 1999-138365P	P	19990610		
	US 2000-589580	A2	20000607		
	US 2000-589216	A	20000607		
	US 2000-589236	A	20000607		
	EP 2000-938205	A3	20000608		
	EP 2000-938211	A3	20000608		
	US 2001-166321	A1	20010615		
	US 2001-27218	A1	20011221		
	US 2001-27272	A1	20011221		
	US 2004-826836	A3	20040416		

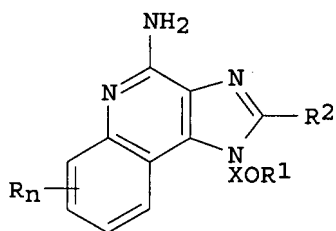
OS MARPAT 139:149629

RE.CNT 61 THERE ARE 61 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L24 ANSWER 16 OF 26 HCAPLUS COPYRIGHT 2007 ACS on STN

TI Preparation of sulfonamidoalkoxyalkylimidazoquinolines as immune response modulators.

GI



AB Title compds. [I; X = CHR5, CHR5, CHR5, R1 = R4NR3SO2R6A, R4NR3SOR7, R4NR3SO2NR5R6A, R4NR3SO2NH2; A = alkyl, alkenyl, aryl, heteroaryl, heterocyclyl; R2 = H, (substituted) alkyl, alkenyl, aryl, heteroaryl, heterocyclyl, alkyl-Y-alkyl, alkyl-Y-alkenyl, alkyl-Y-aryl; Y = O, S(O)0-2; R3 = H, alkyl, arylalkyl; R4 = alkyl, alkenyl, which may be interrupted by  $\geq 1$  O; R3R4 form a ring; R5 = H, alkyl, alkenyl; R6 = bond, alkyl, alkenyl, which may be interrupted by  $\geq 1$  O; R7 = alkyl; R3R7 form a ring; n = 0-4; R = alkyl, alkoxy, OH, halo, CF3], were prepared Thus, tert-Bu 2-[2-[(3-aminoquinolin-4-yl)amino]ethoxy]ethylcarbamate (preparation given) in CH2Cl2 was cooled to 0° and treated with Et3N and methoxypropionyl chloride; The reaction was then warmed to room temperature and



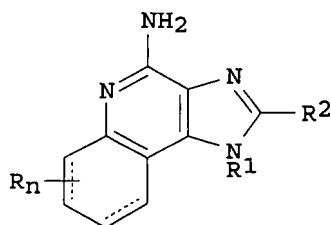
stirring was continued for 1 h to give tert-Bu 2-[2-[2-(2-methoxyethyl)-1H-imidazo[4,5-c]quinolin-1-yl]ethoxy]ethylcarbamate. This was converted to N-[2-[2-[4-amino-2-(2-methoxyethyl)-1H-imidazo[4,5-c]quinolin-1-yl]ethoxy]ethyl]methanesulfonamide in several steps. I showed interferon induction in human cells with lowest effective concns. of 0.0001-1  $\mu$ M.

AN 2003:570648 HCAPLUS <<LOGINID::20070510>>  
 DN 139:133563  
 TI Preparation of sulfonamidoalkoxyalkylimidazoquinolines as immune response modulators.  
 IN Crooks, Stephen L.; Griesgraber, George W.; Heppner, Philip D.; Merrill, Bryon A.; Roberts, Ralph R.; Wei, Ai-Ping  
 PA 3M Innovative Properties Co., USA  
 SO U.S. Pat. Appl. Publ., 46 pp., Cont.-in-part of U.S. Ser. No. 12,599.  
 CODEN: USXXCO  
 DT Patent  
 LA English  
 FAN.CNT 11

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2003139441	A1	20030724	US 2002-165443	20020607
	US 6677347	B2	20040113		
	US 2002193396	A1	20021219	US 2001-12599	20011206
	US 6683088	B2	20040127		
	EP 1541572	A1	20050615	EP 2005-4019	20011206
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, LT, LV, FI, CY, TR				
	US 2004072858	A1	20040415	US 2003-675833	20030930
	US 2004092545	A1	20040513	US 2003-696476	20031029
	US 2004097542	A1	20040520	US 2003-696478	20031029
	US 2005148619	A1	20050707	US 2005-69033	20050228
	US 7132429	B2	20061107		
	US 2005148620	A1	20050707	US 2005-69035	20050228
	US 2005209267	A1	20050922	US 2005-132537	20050519
	US 2005234088	A1	20051020	US 2005-132900	20050519
PRAI	US 2000-254218P	P	20001208		
	US 2001-12599	A2	20011206		
	EP 2001-987297	A3	20011206		
	US 2001-11921	A1	20011206		
	US 2001-13059	A1	20011206		
	US 2001-13060	A1	20011206		
	US 2002-165443	A1	20020607		
	US 2003-680989	A3	20031007		
	US 2003-696476	A3	20031029		
	US 2003-696478	A3	20031029		
	US 2003-696684	A3	20031029		
OS	MARPAT 139:133563				

RE.CNT 58 THERE ARE 58 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L24 ANSWER 18 OF 26 HCAPLUS COPYRIGHT 2007 ACS on STN  
 TI Preparation of imidazoquinolinamines as immune response modifiers.  
 GI



AB Title compds. [I; R1 = ANR3CYNR5XR4; A = alkylene, alkenylene; Y = O, S; X = bond, CO, SO2; R3 = H, alkyl; R4 = (substituted) aryl, heteroaryl, alkyl, etc.; R5 = H, alkyl; R4R5 = atoms to form 3-7 membered (un)substituted heterocyclic ring; R2 = H, alkyl, aryl, etc.; R = alkyl, alkoxy, halo, CF3; n = 0-4], were prepared Thus, reaction of 4-morpholinecarbonyl chloride with 1-(4-aminobutyl)-1H-imidazo[4,5-c]quinolin-4-amine in pyridine afforded N4-[4-[4-amino-1H-imidazo[4,5-c]quinolin-1-yl]butyl]-4-morpholinecarboxamide which induced interferon- $\alpha$  biosynthesis in human cells at a lowest concentration of 3.33  $\mu$ M.

AN 2003:429098 HCAPLUS <<LOGINID::20070510>>

DN 139:6873

TI Preparation of imidazoquinolinamines as immune response modifiers.

IN Crooks, Stephen L.; Griesgraber, George W.; Lindstrom, Kyle J.; Merrill, Bryon A.; Rice, Michael J.

PA 3M Innovative Properties Company, USA

SO U.S., 66 pp., Cont.-in-part of U.S. 6,541,485.

CODEN: USXXAM

DT Patent

LA English

FAN.CNT 7

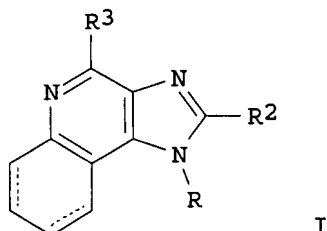
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6573273	B1	20030603	US 2001-28255	20011221
	US 6541485	B1	20030401	US 2000-589236	20000607
	TR 200103576	T2	20020621	TR 2001-3576	20000608
	EP 1438958	A1	20040721	EP 2004-4588	20000608
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, CY				
	EP 1642580	A1	20060405	EP 2005-21837	20000608
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL				
	AT 337007	T	20060915	AT 2000-938205	20000608
	ZA 2001009854	A	20030228	ZA 2001-9854	20011129
	ZA 2001009857	A	20030228	ZA 2001-9857	20011129
	ZA 2001009861	A	20030228	ZA 2001-9861	20011129
	US 2004029877	A1	20040212	US 2001-27272	20011221
	US 6800624	B2	20041005		
	US 2004014754	A1	20040122	US 2003-352604	20030128
	US 6780873	B2	20040824		
	US 2004019048	A1	20040129	US 2003-370800	20030220
	US 6784188	B2	20040831		
	US 2004167154	A1	20040826	US 2004-780379	20040217
	US 6897221	B2	20050524		
	US 2004204438	A1	20041014	US 2004-826836	20040416
	US 7030131	B2	20060418		
	US 2005131009	A1	20050616	US 2005-38434	20050120
	US 7157453	B2	20070102		
	US 2006106052	A1	20060518	US 2006-275699	20060125
PRAI	US 1999-138365P	P	19990610		
	US 2000-589236	A2	20000607		
	US 2000-589216	A	20000607		
	EP 2000-938205	A3	20000608		
	EP 2000-938211	A3	20000608		
	US 2001-166321	A1	20010615		
	US 2001-27272	A1	20011221		
	US 2001-28255	A1	20011221		
	US 2003-370800	A1	20030220		
	US 2004-780379	A1	20040217		
	US 2004-826836	A3	20040416		

OS MARPAT 139:6873

RE.CNT 51 THERE ARE 51 CITED REFERENCES AVAILABLE FOR THIS RECORD

## ALL CITATIONS AVAILABLE IN THE RE FORMAT

L24 ANSWER 21 OF 26 HCAPLUS COPYRIGHT 2007 ACS on STN  
 TI Preparation of 1-(alkyl- or arylthioalkyl) imidazo[4,5-c]quinoline-4-  
 amines and analogs as cytokine biosynthesis inducers  
 GI



AB Title compds. [(un)substituted I; R = Z2Z1R1; R1 = alk(en)yl, heterocyclyl, (hetero)aryl, etc.; R2 = H, alk(en)yl, heterocyclyl, (hetero)aryl, etc.; R3 = NH2; Z1 = SO0-2; Z2 = alkylene; dashed lines = optional addnl. bonds], useful as immune response modifiers, were prepared. Thus, 4-chloro-3-nitroquinoline was aminated by H2N(CH2)4OH and O-protected product reduced to give, after cyclocondensation with BuC(OMe)3, I (R2 = Bu, dashed lines = bonds) [II; R = (CH2)4OSiCMe2CMe3, R3 = H] which was converted in 4 steps to II [R = (CH2)4SPh, R3 = NH2]. Data for biol. activity of I were given.

AN 2002:449683 HCAPLUS <<LOGINID::20070510>>  
 DN 137:20377

TI Preparation of 1-(alkyl- or arylthioalkyl) imidazo[4,5-c]quinoline-4-  
 amines and analogs as cytokine biosynthesis inducers

IN Dellaria, Joseph F.; Merrill, Bryon A.; Radmer, Matthew R.

PA 3M Innovative Properties Company, USA

SO PCT Int. Appl., 66 pp.

CODEN: PIXXD2

DT Patent

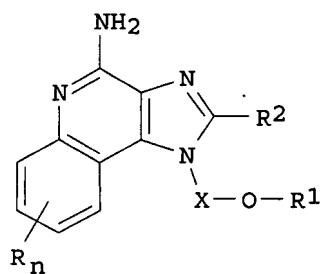
LA English

FAN.CNT 11

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002046192	A2	20020613	WO 2001-US46697	20011206
	WO 2002046192	A3	20030213		
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW			
	RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
	CA 2436846	A1	20020613	CA 2001-2436846	20011206
	AU 200239530	A	20020618	AU 2002-39530	20011206
	US 2003065005	A1	20030403	US 2001-11921	20011206
	US 6664260	B2	20031216		
	EP 1341791	A2	20030910	EP 2001-987297	20011206
	EP 1341791	B1	20050525		
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	EE 200300275	A	20031015	EE 2003-275	20011206
	JP 2004515500	T	20040527	JP 2002-547929	20011206
	HU 200400710	A2	20040628	HU 2004-710	20011206

CN 1511155	A	20040707	CN 2001-820159	20011206
CN 1537111	A	20041013	CN 2001-819907	20011206
NZ 526087	A	20041126	NZ 2001-526087	20011206
BR 2001016026	A	20041221	BR 2001-16026	20011206
AT 296301	T	20050615	AT 2001-987297	20011206
EP 1541572	A1	20050615	EP 2005-4019	20011206
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PT 1341791	T	20050930	PT 2001-987297	20011206
CZ 295848	B6	20051116	CZ 2003-1560	20011206
ES 2242782	T3	20051116	ES 2001-1987297	20011206
AT 319711	T	20060315	AT 2001-992018	20011206
ES 2260323	T3	20061101	ES 2001-1992018	20011206
AT 353895	T	20070315	AT 2001-987283	20011206
TW 584633	B	20040421	TW 2001-90130401	20011207
TW 222972	B	20041101	TW 2001-90130402	20011207
NO 2003002595	A	20030606	NO 2003-2595	20030606
IN 2003CN00894	A	20050422	IN 2003-CN894	20030606
ZA 2003005270	A	20040826	ZA 2003-5270	20030708
ZA 2003005271	A	20041008	ZA 2003-5271	20030708
ZA 2003005273	A	20041008	ZA 2003-5273	20030708
ZA 2003005275	A	20041008	ZA 2003-5275	20030708
ZA 2003005274	A	20041018	ZA 2003-5274	20030708
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US 2004072858	A1	20040415	US 2003-675833	20030930
US 2005148619	A1	20050707	US 2005-69033	20050228
US 7132429	B2	20061107		
US 2005209267	A1	20050922	US 2005-132537	20050519
US 2005234088	A1	20051020	US 2005-132900	20050519
PRAI US 2000-254218P	P	20001208		
EP 2001-987297	A3	20011206		
US 2001-11921	A1	20011206		
US 2001-12599	A1	20011206		
US 2001-13059	A1	20011206		
US 2001-13060	A1	20011206		
WO 2001-US46697	W	20011206		
US 2003-680989	A3	20031007		
US 2003-696476	A3	20031029		
US 2003-696684	A3	20031029		
OS MARPAT 137:20377				

L24 ANSWER 22 OF 26 HCAPLUS COPYRIGHT 2007 ACS on STN  
 TI Preparation of urea substituted imidazoquinoline ethers as immune response modifiers  
 GI



AB The title compds. [I; X = (CH<sub>2</sub>)<sub>2</sub>, CH<sub>2</sub>CH<sub>2</sub>, etc.; R<sub>1</sub> = R<sub>4</sub>NR<sub>8</sub>CR<sub>3</sub>NR<sub>5</sub>ZR<sub>6</sub>alkyl,

R4NR8CR3NR5ZR6aryl, etc.; R2 = H, alkyl, aryl, etc.; R3 = O, S; R4 = alkylene or alkenylene which may be interrupted by one or more O atoms; R5 = H, alkyl; R6 = a bond, alkylene or alkenylene which may be interrupted by one or more O atoms; R8 = H, alkyl, aralkyl; or R4 and R8 can join together to form a ring; Z = a bond, CO, SO<sub>2</sub>; n = 0-4; R = alkyl, alkoxy, OH, etc.] that contain ether and urea functionality at the 1-position, and are useful as immune response modifiers, were prepared E.g., a multi-step synthesis of the urea I [X = (CH<sub>2</sub>)<sub>2</sub>; R1 = (CH<sub>2</sub>)<sub>2</sub>NMeCONHPh; R2 = (CH<sub>2</sub>)<sub>2</sub>OMe; n = 0] which showed the lowest concentration of 0.01 µM and 0.37 µM to induce interferon α and TNFα, resp., was prepared. The compds. I can induce the biosynthesis of various cytokines and are useful in the treatment of a variety of conditions including viral diseases and neoplastic diseases.

AN 2002:449682 HCAPLUS <<LOGINID::20070510>>

DN 137:33298

TI Preparation of urea substituted imidazoquinoline ethers as immune response modifiers

IN Crooks, Stephen L.; Griesgraber, George W.; Heppner, Philip D.; Merrill, Bryon A.

PA 3M Innovative Properties Company, USA

SO PCT Int. Appl., 71 pp.

CODEN: PIXXD2

DT Patent

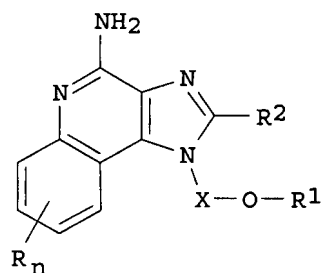
LA English

FAN.CNT 11

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	CA 2436984	A1	20020613	CA 2001-2436984	20011206
	AU 200232497	A	20020618	AU 2002-32497	20011206
	US 2003065005	A1	20030403	US 2001-11921	20011206
	US 6664260	B2	20031216		
	EP 1343784	A2	20030917	EP 2001-992018	20011206
	EP 1343784	B1	20060308		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
	EE 200300272	A	20031015	EE 2003-272	20011206
	CN 1511155	A	20040707	CN 2001-820159	20011206
	JP 2004521092	T	20040715	JP 2002-547928	20011206
	CN 1537111	A	20041013	CN 2001-819907	20011206
	NZ 526088	A	20041224	NZ 2001-526088	20011206
	EP 1541572	A1	20050615	EP 2005-4019	20011206
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, LT, LV, FI, CY, TR				
	BR 2001016470	A	20050816	BR 2001-16470	20011206
	PT 1341791	T	20050930	PT 2001-987297	20011206
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	ES 2242782	T3	20051116	ES 2001-1987297	20011206
	AT 319711	T	20060315	AT 2001-992018	20011206
	ES 2260323	T3	20061101	ES 2001-1992018	20011206
	HU 200600605	A2	20061128	HU 2006-605	20011206
	AT 353895	T	20070315	AT 2001-987283	20011206
	TW 584633	B	20040421	TW 2001-90130401	20011207
	TW 222972	B	20041101	TW 2001-90130402	20011207

NO 2003002449	A	20030528	NO 2003-2449	20030528
IN 2003CN00891	A	20050422	IN 2003-CN891	20030606
ZA 2003005270	A	20040826	ZA 2003-5270	20030708
ZA 2003005271	A	20041008	ZA 2003-5271	20030708
ZA 2003005273	A	20041008	ZA 2003-5273	20030708
ZA 2003005275	A	20041008	ZA 2003-5275	20030708
ZA 2003005274	A	20041018	ZA 2003-5274	20030708
ZA 2003005272	A	20041027	ZA 2003-5272	20030708
US 2004072858	A1	20040415	US 2003-675833	20030930
HK 1069166	A1	20061124	HK 2005-100647	20050125
US 2005148619	A1	20050707	US 2005-69033	20050228
US 7132429	B2	20061107		
US 2005209267	A1	20050922	US 2005-132537	20050519
US 2005234088	A1	20051020	US 2005-132900	20050519
PRAI US 2000-254218P	P	20001208		
EP 2001-987297	A3	20011206		
US 2001-11921	A1	20011206		
US 2001-12599	A1	20011206		
US 2001-13059	A1	20011206		
US 2001-13060	A1	20011206		
WO 2001-US46696	W	20011206		
US 2003-680989	A3	20031007		
US 2003-696476	A3	20031029		
US 2003-696684	A3	20031029		
OS MARPAT 137:33298				

L24 ANSWER 23 OF 26 HCAPLUS COPYRIGHT 2007 ACS on STN  
 TI Preparation of sulfonamido ether substituted imidazoquinolines as immune response modifiers  
 GI



AB The title compds. [I; X = (CH<sub>2</sub>)<sub>2</sub>, (CH<sub>2</sub>)<sub>3</sub>, CH<sub>2</sub>CH<sub>2</sub>, etc.; R<sub>1</sub> = R<sub>4</sub>NR<sub>3</sub>SO<sub>2</sub>R<sub>6</sub>alkyl, R<sub>4</sub>NR<sub>3</sub>SO<sub>2</sub>R<sub>6</sub>aryl, etc.; R<sub>2</sub> = H, alkyl, alkenyl, etc.; R<sub>3</sub> = H, alkyl, aralkyl; R<sub>4</sub> = alkylene or alkenylene interrupted by one or more O atoms; or R<sub>3</sub>R<sub>4</sub> can join together to form a ring; R<sub>6</sub> = a bond, alkylene or alkenylene which may be interrupted by one or more O atoms; n = 0-4; R = alkyl, alkoxy, OH, etc.] that contain substituted amine functionality at the 1-position, and are useful as immune response modifiers, were prepared E.g., a multi-step synthesis of I [X = (CH<sub>2</sub>)<sub>2</sub>; R<sub>1</sub> = (CH<sub>2</sub>)<sub>2</sub>NMeSO<sub>2</sub>Me; R<sub>2</sub> = (CH<sub>2</sub>)<sub>2</sub>OMe; n = 0] which showed the lowest concentration of 0.01 μM and 0.12 μM to induce interferon α and TNFα, resp., was given. The compds. I can induce the biosynthesis of various cytokines and are useful in the treatment of a variety of conditions including viral diseases and neoplastic diseases.

AN 2002:449681 HCAPLUS <<LOGINID::20070510>>  
 DN 137:33297  
 TI Preparation of sulfonamido ether substituted imidazoquinolines as immune response modifiers  
 IN Crooks, Stephen L.; Greisgraber, George W.; Heppner, Philip D.; Merrill,

Bryon A.; Roberts, Ralph R.; Wei, Ai-Ping  
 PA 3M Innovative Properties Company, USA  
 SO PCT Int. Appl., 74 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 FAN.CNT 11

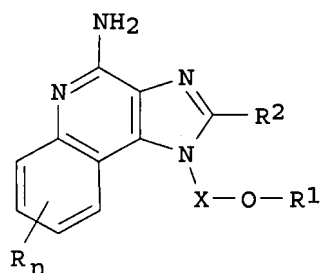
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002046190	A2	20020613	WO 2001-US46582	20011206
	WO 2002046190	A3	20030717		
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	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	CA 2436983	A1	20020613	CA 2001-2436983	20011206
	AU 200239517	A	20020618	AU 2002-39517	20011206
	US 2003065005	A1	20030403	US 2001-11921	20011206
	US 6664260	B2	20031216		
	EP 1341790	A2	20030910	EP 2001-987283	20011206
	EP 1341790	B1	20070214		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
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	CN 1511155	A	20040707	CN 2001-820159	20011206
	JP 2004529078	T	20040924	JP 2002-547927	20011206
	CN 1537111	A	20041013	CN 2001-819907	20011206
	EP 1541572	A1	20050615	EP 2005-4019	20011206
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, LT, LV, FI, CY, TR				
	PT 1341791	T	20050930	PT 2001-987297	20011206
	CZ 295848	B6	20051116	CZ 2003-1560	20011206
	ES 2242782	T3	20051116	ES 2001-1987297	20011206
	NZ 526086	A	20051125	NZ 2001-526086	20011206
	BR 2001016032	A	20060221	BR 2001-16032	20011206
	AT 319711	T	20060315	AT 2001-992018	20011206
	ES 2260323	T3	20061101	ES 2001-1992018	20011206
	HU 200600600	A2	20061128	HU 2006-600	20011206
	AT 353895	T	20070315	AT 2001-987283	20011206
	TW 584633	B	20040421	TW 2001-90130401	20011207
	TW 222972	B	20041101	TW 2001-90130402	20011207
	NO 2003002473	A	20030530	NO 2003-2473	20030530
	IN 2003CN00892	A	20050422	IN 2003-CN892	20030606
	ZA 2003005270	A	20040826	ZA 2003-5270	20030708
	ZA 2003005271	A	20041008	ZA 2003-5271	20030708
	ZA 2003005273	A	20041008	ZA 2003-5273	20030708
	ZA 2003005275	A	20041008	ZA 2003-5275	20030708
	ZA 2003005274	A	20041018	ZA 2003-5274	20030708
	ZA 2003005272	A	20041027	ZA 2003-5272	20030708
	US 2004072858	A1	20040415	US 2003-675833	20030930
	HK 1066005	A1	20060825	HK 2004-108904	20041111
	US 2005148619	A1	20050707	US 2005-69033	20050228
	US 7132429	B2	20061107		
	US 2005209267	A1	20050922	US 2005-132537	20050519
	US 2005234088	A1	20051020	US 2005-132900	20050519
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	EP 2001-987297	A3	20011206		
	US 2001-11921	A1	20011206		

US 2001-12599 A1 20011206  
 US 2001-13059 A1 20011206  
 US 2001-13060 A1 20011206  
 WO 2001-US46582 W 20011206  
 US 2003-680989 A3 20031007  
 US 2003-696476 A3 20031029  
 US 2003-696684 A3 20031029  
 OS MARPAT 137:33297

L24 ANSWER 24 OF 26 HCAPLUS COPYRIGHT 2007 ACS on STN

TI Preparation of aryl ether substituted imidazoquinolines as immune response modifiers

GI



AB The title compds. [I; X = (CH<sub>2</sub>)<sub>2</sub>, CH<sub>2</sub>CH<sub>2</sub>, etc.; R<sub>1</sub> = alkenyl, aryl, R<sub>4</sub>-aryl; R<sub>2</sub> = H, alkyl, alkenyl, etc.; R<sub>4</sub> = alkyl, alkenyl which may be interrupted by one or more O atoms; R<sub>3</sub> = H, alkyl; n = 0-4; R = alkyl, alkoxy, OH, etc.] that contain ether and aryl or alkenyl functionality at the 1-position, and are useful as immune response modifiers, were prepared E.g., a multi-step synthesis of I [X = (CH<sub>2</sub>)<sub>2</sub>; R<sub>1</sub> = CH<sub>2</sub>C.tplbond.CH; R<sub>2</sub> = H; n = 0] which showed the lowest concentration of 0.12 μM and 1.11 μM to induce interferon α and TNFα, resp., was given. The compds. I can induce the biosynthesis of various cytokines and are useful in the treatment of a variety of conditions including viral diseases and neoplastic diseases.

AN 2002:449680 HCAPLUS <<LOGINID::20070510>>

DN 137:33296

TI Preparation of aryl ether substituted imidazoquinolines as immune response modifiers

IN Charles, Leslie J.; Dellaria, Joseph F.; Heppner, Philip D.; Merrill, Bryon A.; Mickelson, John W.

PA 3M Innovative Properties Company, USA

SO PCT Int. Appl., 184 pp.

CODEN: PIXXD2

DT Patent

LA English

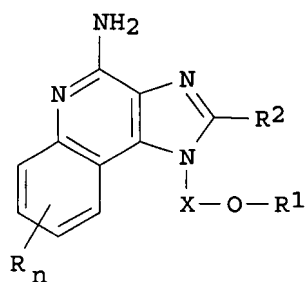
FAN.CNT 11

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RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,				



	BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2430844	A1	20020613	CA 2001-2430844	20011206	
AU 200239516	A	20020618	AU 2002-39516	20011206	
US 2003065005	A1	20030403	US 2001-11921	20011206	
US 6664260	B2	20031216			
EP 1341789	A2	20030910	EP 2001-987282	20011206	
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR					
EE 200300270	A	20031015	EE 2003-270	20011206	
CN 1511155	A	20040707	CN 2001-820159	20011206	
JP 2004523498	T	20040805	JP 2002-547926	20011206	
CN 1537111	A	20041013	CN 2001-819907	20011206	
NZ 526105	A	20041126	NZ 2001-526105	20011206	
EP 1541572	A1	20050615	EP 2005-4019	20011206	
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PT 1341791	T	20050930	PT 2001-987297	20011206	
CZ 295848	B6	20051116	CZ 2003-1560	20011206	
ES 2242782	T3	20051116	ES 2001-1987297	20011206	
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AT 353895	T	20070315	AT 2001-987283	20011206	
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ZA 2003005270	A	20040826	ZA 2003-5270	20030708	
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ZA 2003005274	A	20041018	ZA 2003-5274	20030708	
ZA 2003005272	A	20041027	ZA 2003-5272	20030708	
US 2004072858	A1	20040415	US 2003-675833	20030930	
US 2005148619	A1	20050707	US 2005-69033	20050228	
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US 2001-11921	A1	20011206			
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US 2001-13059	A1	20011206			
US 2001-13060	A1	20011206			
WO 2001-US46581	W	20011206			
US 2003-680989	A3	20031007			
US 2003-696476	A3	20031029			
US 2003-696684	A3	20031029			
OS MARPAT 137:33296					

L24 ANSWER 25 OF 26 HCAPLUS COPYRIGHT 2007 ACS on STN  
 TI Preparation of amido ether substituted imidazoquinolines as immune response modifiers  
 GI



I

AB The title compds. [I; X = (CH<sub>2</sub>)<sub>2</sub>, CH(Et)CH<sub>2</sub>, etc.; R<sub>1</sub> = (CH<sub>2</sub>)<sub>4</sub>CONMePh, (CH<sub>2</sub>)<sub>2</sub>NHCO(cyclohexyl), (CH<sub>2</sub>)<sub>2</sub>NHCO(1-naphthyl), etc.; R<sub>2</sub> = H, alkyl, alkenyl, etc.; R = alkyl, alkoxy, OH, halo, CF<sub>3</sub>; n = 0-4] and their pharmaceutically acceptable salts that contain ether and amide functionality at the 1-position, and are useful as immune response modifiers, were prepared. Thus, reacting 2-(1H-imidazo[4,5-c]quinolin-1-yl)ethanol with 5-bromo-N-methyl-N-phenylpentamide followed by treatment of the resulting N-oxide product with trichloroacetyl isocyanate in CH<sub>2</sub>Cl<sub>2</sub>, and then treating the intermediate with NaOMe/MeOH afforded I [X = (CH<sub>2</sub>)<sub>2</sub>; R<sub>1</sub> = (CH<sub>2</sub>)<sub>4</sub>CONMePh; R<sub>2</sub> = H; n = 0] which showed interferon α induction at 3.33 μM. The compds. I can induce the biosynthesis of various cytokines, and are useful in the treatment of a variety of conditions, including viral diseases and neoplastic diseases.

2002:449679 HCAPLUS <<LOGINID::20070510>>

DN 137:33295

TI Preparation of amido ether substituted imidazoquinolines as immune response modifiers

IN Crooks, Stephen L.; Griesgraber, George W.; Heppner, Philip D.; Merrill, Bryon A.

PA 3M Innovative Properties Company, USA

SO PCT Int. Appl., 79 pp.

CODEN: PIXXD2

DT Patent

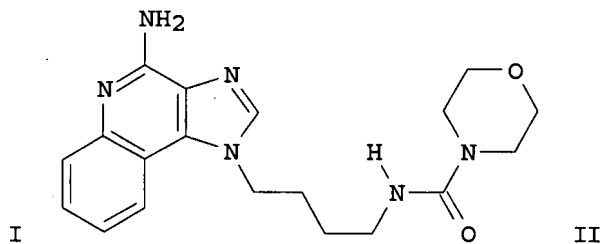
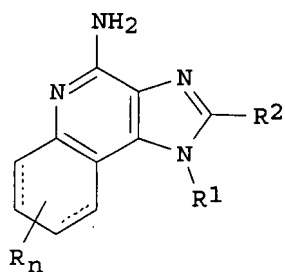
LA English

FAN.CNT 11

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PI	WO 2002046188	A2	20020613	WO 2001-US46359	20011206
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	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
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	AU 200232482	A	20020618	AU 2002-32482	20011206
	US 2003065005	A1	20030403	US 2001-11921	20011206
	US 6664260	B2	20031216		
	EP 1341792	A2	20030910	EP 2001-992005	20011206
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	CN 1511155	A	20040707	CN 2001-820159	20011206
	CN 1537111	A	20041013	CN 2001-819907	20011206
	JP 2004532810	T	20041028	JP 2002-547925	20011206
	NZ 526106	A	20041126	NZ 2001-526106	20011206

EP 1541572	A1	20050615	EP 2005-4019	20011206
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CZ 295848	B6	20051116	CZ 2003-1560	20011206
ES 2242782	T3	20051116	ES 2001-1987297	20011206
BR 2001016464	A	20060221	BR 2001-16464	20011206
AT 319711	T	20060315	AT 2001-992018	20011206
HU 200600338	A2	20060828	HU 2006-338	20011206
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 TI Preparation of urea substituted imidazoquinolines as immune response modifiers  
 GI



AB The title compds. [I; R<sub>1</sub> = alkylNR<sub>3</sub>CYNR<sub>5</sub>XR<sub>4</sub>, alkenylNR<sub>3</sub>CYNR<sub>5</sub>XR<sub>4</sub> (wherein Y = O, S; X = a bond, CO, SO<sub>2</sub>; R<sub>3</sub> = H, alkyl; R<sub>4</sub> = (un)substituted aryl, heteroaryl, alkyl, etc.; R<sub>5</sub> = H, alkyl; R<sub>4</sub> and R<sub>5</sub> can combine to form 3-7 membered (un)substituted heterocyclic ring); R<sub>2</sub> = H, alkyl, aryl, etc.; R = alkyl, alkoxy, halo, CF<sub>3</sub>; n = 0-4], useful as immune response modifiers, were prepared Thus, reacting 4-morpholinecarbonyl chloride with

1-(4-aminobutyl)-1H-imidazo[4,5-c]quinolin-4-amine in pyridine afforded II which induced interferon  $\alpha$  biosynthesis in human cells at 3.33  $\mu$ M. The compds. I can induce the biosynthesis of various cytokines such as interferon  $\alpha$  and TNF $\alpha$  (data given), and are useful in the treatment of a variety of conditions including viral diseases and neoplastic diseases.

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 PA 3M Innovative Properties Company, USA  
 SO PCT Int. Appl., 106 pp.  
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